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Lecture.

LOCAL ŒDEMA.

Delivered at the Hospital of the University of Pennsylvania, April 27, 1880,

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Reported by William H. Morrison, M.D.

Œdema of one Leg from the Pressure of a Truss.

Gentlemen:—Here are two cases, one of which presents points of particular interest, but the other is of rather a common type. They are both instances of swelling of single members. In one case the leg, in the other the arm. The term œdema, or effusion into the subcutaneous connective tissue, is applied to all cases in which swelling of a part pits on pressure. Of course, I except those cases in which there is manifest inflammation. You know that inflammation presents among its local signs swelling of the part, redness, heat and swelling being the distinguishing features of inflammation. There is often present in inflammation a swelling that pits on pressure; to this the term inflammatory œdema is applied; but when we speak of œdema simply, it is understood that there is simply an effusion of liquid into the subcutaneous tissue, pitting on pressure.

The distribution of œdema varies greatly, sometimes being over the whole body, at other times localized to a single member, or even to a portion of a single member. The matter effused also varies greatly; in a typical case of simple œdema the matter effused is the serum of the blood. If the distention is very great, so that the skin appears to be on the point of bursting, the part may feel tense and elastic, and not pit much, but, as a rule, the amount of the effusion is not so great. In other cases we find that the matter effused is not merely serum, but is mixed with more or less of a fibrinous element. This fibrinous matter, which, to some extent, coagulates in the tissues, may become so great as to give rise to marked hardness; in such cases, pitting is very slightly marked. Cases of this kind are especially noticed where there is some inflammatory action going on, while cases of serous œdema, as a rule, occur where there is some obstruction to the circulation.

Such being the case, we should expect to find a great many causes for œdema. One of the most common causes is organic disease of the heart, causing obstruction of the general venous circulation, congestion and œdema. It is customary to say that this œdema generally begins at the feet and extends upward.

Another frequent cause of œdema is organic disease of the kidney. Among the most common symptoms of the different forms of so-called Bright's disease is œdema. This affects not only the legs but also the general surface of the body. Disease of the heart first causes swelling of the legs, and it is not until the later stages of the disease are reached that the œdema affects the upper part of the body; but in Bright's disease we have the upper parts of the body affected before the lower.

Then, again, we find œdema affecting both legs. Among the causes that give rise to this is anæmia, where the blood is watery and the power of the heart is lessened. Here we have the blood settling in the legs, and œdema occurring, particularly toward evening.

Again, we have œdema that does not even affect both legs, but only one. Here we have a marked illustration.

In this case the swelling is limited to the left leg. You can see at a glance that the left leg is much larger than the right. There is, perhaps, a trace of œdema in the right leg, but it is very slight. One of the most reliable ways of telling whether there is œdema or not, is to feel for the malleoli of the tibia and fibula. If there is no œdema they are sharply cut, but if there is œdema they cannot be felt so plainly. Another good plan is to press over the spine of the tibia. This shows a little œdema of the right leg. The other leg is distinctly œdematous, and pitting distinctly on pressure.

We have then a local œdema, which extends to the knee and up the thigh.

Now, what are the causes of unilateral œdema? We should expect to find that it is not due to a central cause. He has no heart disease. If it came from heart disease, we should expect to find both legs affected. There is no albumen in the urine. If it were due to kidney disease, we should find the upper part of the body also involved. It is very rare that a central cause gives rise to a unilateral œdema; it never occurs unless there is some local cause affecting one leg more than the other.

We then approach the part affected, and determine if there is any special local cause favoring this swelling. We notice immediately that the skin is discolored on both sides, discolored in the way you find it when there has been long standing congestion and chronic eczema. Here is the scar of what appears to have been a varicose ulcer. We see distended veins on the right side, to some extent, but they are more marked on the left. There is a varicose condition of the small veins particularly; the large ones do not appear to be much distended.

Going further, following the course of the veins, I examine the groin, and I find that this man has a left femoral hernia, for which he wears a truss. The truss has a very powerful spring, and the pad, which is very long, is so placed that, as you can see at a glance, it bears with great force directly upon the course of the femoral vein. There can be no doubt but that we have here the explanation of the œdema of this man's leg.

There is a varicose condition of the small vessels on both sides, but this is not marked enough on either side to cause much trouble. Here we have had a local obstruction to the blood passing through the femoral vein; this has caused passive congestion and œdema.

You will often find local œdema caused by mechanical pressure applied in curious ways. A too tight garter will often cause œdema of the leg. I have seen a case of œdema of the brow and face, caused by wearing too tight a hat. This œdema had been supposed to be due to some local condition of the tissues.

Œdema of one Arm from Inflammation of the Vein.

Among other causes of obstruction to the return of the blood, is obliteration of the vein, not from pressure, but from disease of the vein itself; especially does this come from the formation of a clot, a thrombus. The instances where we have œdema from thrombus and obliteration of the vein are very numerous. Œdema from this cause is not at all uncommon in cases where the circulation is very feeble, as in phthisis. It is not rare to find a patient with phthisis complaining of swelling of one leg. You immediately examine the urine, fearing that albuminoid degeneration of the kidney has commenced; but the urine contains no albumen, and careful examination shows that the œdema is due to a thrombus forming in the vein.

You meet with this condition in other parts of the body, depending, remember, not upon a clot of blood carried from the heart, an embolus, but depending upon a clot formed in the vein.

Now, mixed up with this question of thrombosis is the subject of inflammation of the coats of the veins, or phlebitis, and we have an illustration of this condition in the so-called milk leg of childbed or phlegmasia alba dolens. It is a local œdema associated with inflammation of the femoral veins. This condition is most frequently met with affecting the femoral vein. It is not limited to women in childbed. It is a common enough accident after typhoid fever. It may occur wherever there is any irritative action going on in the pelvic region. In childbed it is the change going on in the uterus; in typhoid fever, it is the ulcers about the ileo-cæcal valve. The inflammation extends to the sheaf of the iliac or femoral veins, and sets on foot a phlebitis, this passes downward, a clot is formed, obstructing the vessel and œdema is the result. Less commonly, you meet with a similar condition of phlebitis in other parts of the body.

While it is true that the vein is chiefly affected in phlegmasia alba dolens, the œdema is not entirely due to venous congestion. There is also an element of lymphatic trouble; the lymphatics that run along the course of the vein are also inflamed, and we have a lymphadenitis associated with the phlebitis. The matter effused is not only serum,

but there is also a plastic matter from the lymphatics, and the œdema is harder and less doughy than in the simple form.

This man presents himself complaining of a local swelling of the right arm. On examination we find no swelling of the left side, but on the right side you observe that the arm is greatly swollen. The hand is distended and purplish, and when I press it here over the loose connective tissue, it pits. The forearm and arm are also distended. There is also a venous hue, which extends to the shoulder; the shoulder is swollen, and this extends slightly to the pectoral region. The fold of the axilla is partly obliterated; when I press over the pectoral and upper mammary regions, I feel that the tissues are in this œdematous state. There is a little fullness over the scapular region; this does not feel like the œdema of which I have been speaking, *i. e.*, from venous obstruction. It is more firm, more waxy in its feel, as though the tissues were infiltrated with something more plastic than water.

What could give rise to this? There is no cardiac or renal trouble. Any suspicion of such a cause would be removed by the local character of the œdema. We must look for some local cause.

He says that it has existed for seven or eight months, and that it followed a blow on the left side.

Let us see if we can find any local pressure obstructing the vein. Where should we look for it? First in the chest. One of the most common causes of œdema limited to the arm is the presence of a solid tumor in the chest, pressing upon the veins as they return the blood from the arm. Enlargement of the bronchial glands will sometimes cause œdema of the arm. I shall, therefore, first call your attention to the physical signs. He moves his chest well. He has no cough or shortness of breath. On percussion, the resonance over the left side is good, but at the apex of the right lung, probably owing to the thickness of the tissues, the resonance is not quite as good. There is no approach to flatness; simply a little elevation of pitch. There is no flatness anywhere. On auscultation, I hear no râles; the respiration is a little blowing at the right apex, but there is nowhere any evidence of serious disease which would cause this condition. In this hurried examination I find no solid tumor.

In addition to solid tumors, an aneurism of the arch of the aorta may press upon the veins at their entrance into the chest, so as to cause œdema, but examination shows no aneurismal tumor.

Let us see if we can find any evidence of this obstruction causing enlargement of collateral vessels. You see at once that we can. I would ask your particular attention to these enlarged capillaries, forming a zone around the base of the thorax, more marked on the right side. This is a very characteristic evidence of obstruction to the passage of the blood into the vena cava. I have noticed this condition quite constantly in intra-thoracic tumors. I should not like to say positively that there is no intra-thoracic tumor until I have gone over the case more carefully.

Secondly, tumors in the axilla may cause mechanical pressure, but there is no such formation here.

Lastly, instead of having mechanical pressure in the chest or axilla obstructing the return of the blood, we may have inflammation of the sheaf of the vein, and perhaps of the lymphatics, causing phlebitis and obliteration of the vein. This would be phlegmasia alba dolens of the arm. In cases where the trouble is in the groin, you will sometimes be able to feel the femoral vein as a hard cord, tender to the touch. I search here to see if I can find any evidence that the brachial or axillary veins have been turned into solid cords, but I detect no change. Pressure does not cause pain; and yet there can be no doubt but that we have to deal with occlusion of the brachial vein, but the occlusion is further in, and affects the vein after it becomes subclavian. If it were not so, we would not have this distention of the capillaries at the base of the chest.

We may, therefore, pretty confidently assert that this man is suffering from occlusion of the subclavian vein, which prevents the passage of blood into the vena cava, and has thus caused œdema. You will notice that this has appeared to come on in immediate sequence to a blow on the chest, and it is quite probable that at the time there was a sudden wrench, inflammation of the vein was set up, which has run on and has been followed by thrombosis.

Now, as to the results, prognosis and treatment. Of course, the prognosis depends entirely upon the cause. If there is a solid tumor in the thorax, the œdema is only of secondary importance: thus if there is a sarcoma in the chest, pressing on the vein, the œdema is only a symptom, and the prognosis is, of course, unfavorable. On the other hand, failing to find anything of this kind, the prognosis is, as a rule, favorable, so far as concerns the ultimate restoration of the part, but it is uncertain as to the length of time that will be required. Although the part may be

restored to usefulness, it frequently happens that it remains permanently enlarged. I have frequently seen in women who have suffered from milk leg, one leg three-fourths of an inch thicker than the other. Sometimes even after the part appears to be well, there is a sense of weight, clumsiness in the limb, and a tendency to get tired sooner than the other, showing that the collateral circulation does not perfectly return the blood from the part. The treatment is a matter of some importance. Of course, time is the chief element. The part should be kept at rest, the inflammation checked and prevented from extending, and time be allowed either for the clot to be absorbed or the restoration of the circulation by the enlargement of the capillaries. Occasionally a clot becomes absorbed and a channel is formed through its centre, but in other cases the affection of the coats of the vein and the density of the clot is such that it never undergoes this channeling process, but remains as a solid white cord.

The length of time required for the enlargement of the capillaries varies with the extent of the clot and the abundance of the collateral branches. In the thigh the circulation is restored comparatively soon, but in the arm I fear that it will take a long time.

Rest of the part should be insisted on. Counter-irritation over the part by the repeated application of small blisters, or by the repeated use of a weak solution of croton oil and iodine, should be practiced.

I do not know that drugs exert a very great influence over the absorption or organization of these clots, and certainly no drug should be given which would in any way interfere with the digestion. Where a patient is weak, as after childbirth or typhoid fever, a tonic treatment is indicated. Possibly iodide of potassium might do some good, if the clots are very firm. Bandages of the parts and frictions are of service, but must not be used until late in the course of the trouble, for the reason that if the clot is detached there is danger of a serious result ensuing. You can easily understand this. Suppose a clot in the femoral vein is detached; it is carried into the right side of the heart, and thence into the pulmonary artery, causing embolism of the pulmonary artery. It is to this cause that the sudden deaths after childbirth are often due. The large uterine sinuses are filled with clots; one of these becomes detached, is carried to the right side of the heart, is pumped into the pulmonary artery, and death results. I have seen death in the same way after phlegmasia alba dolens in typhoid fever. I should especially insist that there should be no rubbing of the part. Later, when you are satisfied that the organization of the clot is finished and there is no danger of detaching it, proper bandaging is useful.

COMMUNICATIONS.

OBSERVATIONS ON VENESECTION.

BY G. W. GARRISON, M.D.
Read before the Licking County, O., Medical Society.

* * * I don't wish to be understood as opposed to any of the now popular arterial sedatives, but I do most unqualifiedly denounce as the first in order in all congestive inflammatory troubles, those agents, where we have congestion with inflammation of an organ of a sthenic type. But bleeding, systemically or locally, together with other adjuvants, as fomentations or sinapisms, etc., should hold the first place; after trying this plan, you may consider the propriety of anodynes and sedatives, as the next best step.

Physiologically, bleeding affects functionally every organ of the body, proving its great utility in all congestive conditions or diseases of a sthenic type in plethoric subjects, while local bleeding only acts revulsively, unless carried sufficiently far enough to affect the general system. Bleeding promotes absorption, at the same time blunts the functions of all the other organs of the body not concerned in the constructive metamorphosis of the system. This is apparent in congestion with local hyperæmia, as after bleeding the absorbents are set to work at once to remove the engorged gland, and it will be but a short time until all evidence of congestion or local stasis will be dispelled. Bleeding lessens the fibrin of the blood, as well as the salts and globules, but increases the water.

Therapy.—The therapeutical effect of bleeding in plethoric conditions is largely mechanical, and the remedy would at once suggest itself in congestion of the lungs, when oxidation of the blood, you all know, has become impeded, owing to local stasis on the venous side of the circulation and rapid influx of blood on the arterial; then to open the median basilic vein in the arm and abstract, say 20 to 30 ounces of blood from the circulating fluid, there would be a reversing (somewhat) the order of things within the parenchyma of the lung, for on the arterial (or systemic circulation) the vis a tergo would be lessened, and vascular tension relaxed, and on the venous, absorption and clearing up of the pulmonary tissue would be inaugurated and repair would rapidly follow as a natural consequence.

The same course of treatment might be pursued in apoplectic forms of congestion of the brain, in which danger would be averted by a generous bleeding, thereby relieving strain on the cerebral arteries. Again, in puerperal eclampsia, a disease always attended with evidences of congestion of the brain, how happily a free bleeding, followed with some other adjuvant, like chloroform inhalation, speedily acts in cutting short those frightful cases. In endocarditis, which is generally accompanied by overdistention of blood on the right side of the heart, the mechanical and remedial effect of bleeding will be very marked and decided. In acute pleuritis, peritonitis, and neuralgias with congestion, the abstraction of blood will greatly relieve the pain and promote quietude, almost like magic. So I might enumerate other diseases where depletion would be advisable, but will not tax your patience further, only by giving a few suggestions in reference to the practice of scarifying, and cupping, and leeching; and after a short description, will report a few cases, as at first intimated.

The propriety of cups and leeches is for their local and revulsive effect (as before remarked), as it would require too much waste of time and torture of the patient to carry this sort of a procedure far enough to affect the general circulating fluid, to make a systemic impression, as phlebotomy and arteriotomy, etc. Leeches are not very easily kept here, and especially among country practitioners; and if they were, I much prefer cups, as their effects are greater and more decided, except in a few instances where cups, owing to the locality of the body, could not be used or applied, as to the neck in tonsilitis, conjunctivitis, orchitis, otitis, etc. Then in perityphilitis, myelitis, nephritis, gastritis, and hepatitis, etc., cupping seems to be a very rational course to pursue at the onset, and oftentimes the remedy par excellence, and none other required in some cases. In the application of cups to a patient it is not necessary to stop at one or two at a single operation; you may use half a dozen at once; and the same way with leeches; use enough to produce the desired effect as speedily as possible.

REPORT OF CASES.

CASE. 1.—Mrs. G, in her third confinement (the two previous she had puerperal convulsions); when the child's head began to engage in the superior strait, symptoms of a very suspicious character were evident; at first, pain in the head, bright lights with strange sounds in the ears, pulse very full, and the rhythm of the heart's action could be felt at the fingers' ends. I corded the arm and bled thirty ounces, which answered every indication in the case. Labor proceeded interruptedly for an hour or two, resulting in the birth of a vigorous boy, and the mother had no untoward symptoms to follow.

Second.—Six cases, consecutively, of puerperal eclampsia: Mrs. K. and P., of Chatham, Mrs. H. and G., of Hunt's, Mrs. L. and B., of Utica. Three of these were primiparæ and three multiparæ. Two had convulsions before labor and four after labor. These cases were all bled freely, and recovered.

Third.—Hysterical patients. I have had six or eight of these cases, and bleeding seems to be the best and surest way to scare them out of their whimsical notions.

Fourth.—Pleuritis. Mr. H had a severe attack of pleurisy, rendering respiration quite difficult. I bled him thirty ounces; when relief was speedy.

Fifth.—Otalgia in an unmarried lady, age 35 years. In her case I labored and prescribed for about four hours, using hypodermic injections of morphia and hot applications to the ear and temporal region, and also dropped warm water in the ear, in which I had dissolved morphia, and as time passed, my patient was becoming more miserable. I finally bled her from the arm, some twenty ounces, and the effects were gratifying to a tortured patient, and I assure you that the doctor felt relieved. But in all of my subcutaneous administrations of morphia I failed to discover any of its physiological effects. The pain or neuralgia did not return.

Sixth.—Mr. F. had an attack of gastralgia. I was called to see him thirty-six hours afterward, in consultation with Dr. McKelvy. Upon examination of the case, and the doctor telling me what he was doing, I could only say that the treatment was orthodox, and suggested its continuance; at the same time I assured the patient that relief would certainly come soon, and returned home. In about four hours was sent for in great haste (and the other doctor discharged from the case), and informed that Mr. F.'s cramps were worse than ever. When I arrived I found him doubled up like a dog in his kennel of a cold night. I immediately bled him from the arm, sixteen to twenty ounces, as everything was favorable for such treatment. I stayed with him for some hours afterward, and the pain did not return. I gave him ¼ grain of morphia, hypodermically, two hours after venesection, and within thirty minutes he began to talk at random and would scratch his nose, and, in fact, itched all over, for the first time, proving again that all the

morphia which Dr. McKelvy had given him was not absorbed; but when the system was properly prepared by bleeding, promptly the function of absorption was restored.

To conclude: in the extremes of life, *i. e.*, the very young and aged persons, I would not advise systemic bleeding; for, recall to mind, the coats of the arteries in the old are undergoing calcareous metamorphosis, thereby rendering their elasticity imperfect; while in the young the depletion by blood-letting seems to be too much of a shock to their nervous system; as the momentary anæmia produced in the phlegmatic adult by venesection, in children the effect is still greater, producing a nervous shock or collapse. In conclusion: if I have given any light, either clinically or otherwise, upon the present occasion, can we not restore the lancet to its proper place in our therapeutical remedies?

RHEUMATISM; PATHOLOGY AND TREATMENT.

BY FRED. HORNER, JR., M.D.,
Of Salem, Va.

Acute rheumatism is usually marked by severe pain in one or more of the large joints of the extremities, rigors, hot skin and fever, pulse 120, with gastric and nervous derangement and headache, sometimes amounting to active delirium. A French humorist thus describes the pain: "Place your joint in a vise, and screw the vise until you can endure it no longer; that represents rheumatism." The disease is universal in cold climates, among people exposed to the weather; seamen on board ship, merchant and war vessels, contract it by sleeping on wet decks. In the tropics I have known sailors, during a "Norther," to be taken down with rheumatism. Naval captains will not be persuaded to the contrary that the orthodox custom of washing down decks during wet and cold weather is anti-hygienic. The subject of rheumatism may have premonitory symptoms for years previous to the occurrence of a serious illness, owing to the existence in the blood, from hereditary constitution, of noxious elements, the lithates, oxalates, ammonia, lime, and uric acid, constituting a true "materies morbi." Then occurs sub-acute inflammation of the neurilemma and of the fibrous, serous and synovial tissues; the patient is subject to neuralgia, headache, and attacks of gravel, usually occurring in the autumn or spring months, when the symptoms are aggravated by the prevalence of easterly winds, barometric changes, and excess of electricity in the atmosphere.

The urine, when examined, has an acid reaction, and deposits either lithates, which are of brickdust color, resembling Cayenne pepper, or oxalates, that have the consistence and color of mortar; the blood is so highly charged with uric acid as to affect the nervous substance of the brain. In one example the general circulation was so deranged that the tongue was swollen to an enormous size; the fasciæ of the muscles of the abdomen and the diaphragm were affected with cramps, accompanied by delirium, loss of consciousness, and dysphagia. In the fibrous form of rheumatism the fever is usually the highest, the tongue is thickly furred, the pulse is full and bounding, there are profuse acid perspirations, and the urine is high colored and deposits a sediment consisting of the urates mixed with free uric acid; the kidneys fail to perform their function, and the urea which is not eliminated accumulates in the system and true blood poisoning follows. When these symptoms are violent, the tendency of the inflammation to attack the heart is great. Then effusion of lymph into the pericardium occurs, and occasionally in the interstices of the semilunar valves. The membranes of the brain and the brain itself may also suffer, causing intense pain, coma, and even death.

Treatment.—This embraces the continued use of mild purgatives, anodynes, alteratives and local applications. Pil. hydrarg., chlorid. and ol ricini are to be preferred, and should be repeated if required. 2d, pulv. opii co., gr. vj, at night, every three hours, to induce sleep and diaphoresis; and 3d, solutio salicylate of soda, ℥ ss every three hours, until the fever is subdued. The following formula then may be given:—

℞. Solutio. protiod. potass., f. ℥j
Vini colchici, gtt. xxv.
Ter in die.

The prescription to be continued for six weeks; the patient should be kept in bed or confined to a well warmed apartment, be clad either in woolen, silk or fur during the winter months, and warned against premature exposure to the weather. Insulation by the use of glass supports at the four corners of the bed is recommended; also, the various forms of metallic rings, plates etc., and electro-galvanic belts, by which a current of electricity is applied conveniently and constantly to any part of the body. The scriptural commendation to anoint the body, for example, with cold cream or sweet oil, also comes in well, especially after bathing; the unctuous substance is a non-conductor, and, besides, is promotive of a health-

ful condition of the skin and cutaneous nerves. As to local applications, baths of water as hot as can be borne, for the loins, feet and even head, when the occipito frontalis and fifth pair of nerves of the face are the seat of pain, may be used with great advantage also; pure chloroform applied to the surface, cloths steeped in strong hop tea, will also avail, especially in spasm of the abdominal muscles and diaphragm. The patient may be allowed a generous diet, and lemonade *ad libitum*. It may be added that I know of nothing comparable to Horsford's Acid Phosphate, to relieve the indigestion and so-called sick-headache and mental depression incident to certain stages of rheumatism; and also the thermal alkaline waters of Vichy, Baden Baden, and the Hot Springs of Virginia. In the language of Mark Twain, many patients, after a six weeks' or three months' sojourn and trial of the baths and these mineral waters, leave, and "cordially declare Vichy and Baden Baden are welcome to the legacy of their rheumatism." The late General Robert E. Lee, a short time before his death, bore testimony to the virtues of the thermal and mineral waters of the White Sulphur and Hot Springs of Virginia, which he affirmed had entirely cured him of severe rheumatism, contracted during his eventful campaigns. This class of patients who can afford the expense will do well to seek a residence in Southern or tropical latitudes, where extremes of weather, electrical and barometric changes, are never felt, especially our easterly winds, which have ever intensified the sufferings of the rheumatic.

Among the various methods of treatment which have been suggested of late years by eminent physicians, for the cure of rheumatism, may be mentioned briefly that of Prof. J. M. Da Costa, and published in the Reports of the Pennsylvania Hospital for 1869. His article on the therapeutics of acute rheumatism is based on a series of cases treated with bromide of ammonia, in ten or fifteen grain doses, every two or three hours. The remedy, Dr. Da Costa claims, is especially useful for "patients troubled with great restlessness and pain during acute rheumatic fever, and, on the whole, the results are favorable as regards the prevention of cardiac disease, particularly of endocarditis; this bromide salt has a sedative action on the nervous system and circulation, partly as an eliminative and particularly as a diuretic, though in chronic rheumatism bromide of ammonia is decidedly inferior to the iodide of potassium."

In England, the practice recommended by Todd, who has published a standard treatise on Acute Diseases, is generally adopted. The author assumes that "rheumatic fever is a state of high febrile excitement, induced by the accumulation of a peculiar morbid product, or materies morbi, in the circulation, with symptoms merely caured by certain local derangements, produced at those points whence elimination from the system is taking place. His treatment by elimination is to give the patient an alkaline mixture of bicarbonate of potassium, a scruple or half drachm; nitrate of potassium, ten grains; pill opii or Dover's powder, at night, and to envelop the limbs in soft cotton wool, covered in carefully with a sheet of oiled silk."

OLEATE OF MERCURY.

BY A. HENRIQUES DE YOUNG, M.D.

Read before the James Aitken Meigs Med. Association, of Philadelphia.

I wish to call your attention in this brief paper to a remedy which I deem a valuable addition to our materia medica; to wit, *oleate of mercury*.

Oleic acid, according to Fowne, is obtained by the saponification olein, the fluid constituent of most natural fats and fixed oils. The oleate is the result of the combination of the oleate with a base. The article dispensed is a solution of the oleate in oleic acid, the latter combining with mercury, bismuth, zinc, lead, atropia and morphia. They are prepared generally as five or ten per cent. solutions, and with the exception of the oleate of zinc, are liquid.

The first use I ever made of the drug was in a case of tinea decalvans or alopecia areata, if we wish to latinize the condition found. The patient, a young girl of sixteen years, of a consumptive family, though strong and healthy herself, noticed, about five years ago, a white streak in the scalp, devoid of hair and covered with a thin scale. This was immediately followed by bald spots appearing all over the head, until complete baldness was threatened. The spots varied in size from half an inch to two inches in diameter, each covered with a thin scurf, which on being removed, the skin was found very nearly normal, perhaps slightly congested. Each patch was well defined, the hair ending abruptly at the margin. Matting of the hair occurred in the beginning; then it became lustreless and brittle, the ends split, and it fell out. During the course of the disease, and particularly in the commencement, itching and formication greatly troubled the patient. Various remedies were used, mercurials, copper wash, sulphur, sulphurous acid and others, all with no result. The scalp in the meanwhile being shaved and attention paid to

cleanliness. This state of affairs continued for over five years, new hair springing up only to perish again. Nine months ago I examined the patient and directed her to use a five per cent. solution of oleate of mercury. The hair was shaved off and the oleate rubbed well in every day; in the morning the scalp was well cleansed with Castile soap and water, and the oleate again applied. In the course of a month a great change was noticed, the hitherto bald spots became covered with hair. On again prescribing the remedy, I added as a tonic five grains of the alkaloid quiniæ to the ounce. The hair is now jet black, curly and thick, and from three to four inches long. The scalp is entirely free from bald spots, and I consider her cured of a malady alike detrimental to her hair and peace of mind.

The cause of this disease is parasitic, and its seat the hair follicles.

Tilbury Fox, in his work, says the fungus in tinea decalvans is "the microsporon auduoini. The spores are from the $\frac{1}{25000}$ to the $\frac{1}{50000}$ of an inch, the filaments few, wavy and devoid of granules. The fungus is sometimes found in the epithelium at the extending edge of the disease. He believes, however, that it often lodges behind, in the empty follicles, attacking the epithelial structures therein and interfering with the proper re-formation of the hair."

This case is remarkable on account of its duration and for the shortness of the period in which the cure took place. This, I believe, is due to the rapid penetration and action of the oleate, a property not possessed in the same degree by the ordinary ointments.

I have had happy results in a case of indurated acne of the face occurring in a young man without obvious cause. The disease was of three years' standing, the face being dotted with the pustules and nodules of inflammatory deposit in the skin. Seborrhœa was present to such an extent that it made it difficult to grasp the skin. He had been using the following—

℞. Liq. potassæ, ℥j
Aquæ rosæ, ℥iv. M.

and applied it several times a day.

I frequently, with the aid of a bistoury, scarified the skin and let out the stagnated blood and broken down sebum. Under this treatment he improved, but still the indurations remained, and for this I ordered equal parts of a five per cent. solution of oleate of mercury and cosmoline. Under its influence the nodules and indurations disappeared, and he is now cured. I have seen the speedy dissolution of enlarged glands when treated with the oleate of mercury.

Mr. John Marshall, of England, who first introduced the article, recommends it for all parasitic skin diseases. He also uses the oleate of mercury and morphia in superficial inflammations, especially of the joints. Bartholow, in his work on therapeutics, says "the oleate is extremely serviceable in syphilitic indurations, but is not advisable when ulceration exists." He further remarks that it promptly produces the constitutional effects of mercury. In my cases the oleate was used for several months, and no ill effects followed.

Dr. Alder Smith, in the *British Medical Journal*, reports a case of tinea sycosis cured by the constant application of a five per cent. solution of oleate of mercury.

Dr. John V. Shoemaker, in a paper, urges its use in eczema, psoriasis, pityriasis, erythema, and herpetic eruptions. He found it an invaluable application for general thinning and loss of hair, and employed the oleate of atropia in arresting the abundant secretion of seborrhœa and in subduing high inflammatory action in some cases of erysipelas. He found in the oleate of bismuth a useful remedy in soothing and relieving the cutaneous irritation of acute specific eruptions, especially scarlatina.

Dr. Shoemaker sums up their advantages as follows: First, they do not decompose, like the ordinary ointments, and act as irritants to the skin. Further, oleic acid possesses absorbent and solvent powers that are more active than the bases of ointments. And lastly, they, being liquid, are better suited for application over the scalp, beard, axillary and pubic regions, as they do not mat together the hair.

Hospital Reports.

JEFFERSON MEDICAL COLL. HOSPITAL.

SERVICE OF PROF. WM. THOMSON.

Reported by H. F. Hansell, A.M., M.D.

Two Cases of Optico-Ciliary Neurotomy.

The operation of section of the optic and ciliary nerves has recently been brought prominently before the profession as a substitute for enucleation. Its advocates claim for it the therapeutic efficacy of the enucleation without the deformity necessarily resulting from the operation. Not many years ago the only prevention of sympathetic ophthalmia and only cure for sympathetic irritation was removal of the offending eyeball, the unsightliness of the empty orbit being afterward concealed, to a certain degree, by an artificial eye. It needs no argument to prove the superiority, both in a cosmetic and therapeutic point of view, of the natural organ, with its unchanged powers of movement and perfectly nor-

mal aspect, over the artificial substitute, and in that superiority consists the advantage of opticociliary neurotomy over enucleation.

As an "eye disease," sympathetic ophthalmia belongs to the domain of the specialist, but its influence upon the general system is so great that it is not without considerable interest for the non-specialist. Through that curious connection which we call reflex irritation, other and remote organs of the body become involved, and the practitioner, disregarding the diseased eye as the cause of the trouble, seeks its explanation in the nervous system and alimentary canal. He is misled by the headache, sleeplessness, pain in the neck and back, loss of appetite, irritable stomach and utter weakness, symptoms every one of which is dependent upon the diseased eye, and which disappear immediately when the source of irritation is removed.

CASE 1.—Miss S. H., aged 43, after variola at ten years of age, suffered from corneal ulcers, which left her with diminished vision. No further trouble until three months ago, when left eye was inflamed, painful, and gradually lost its power of sight. From the day of admission to the hospital until the operation, one week, the condition of the patient was deplorable. She was so weak that she had not the power to sit up in bed without support; suffered from a stomach so irritable that she was unable to retain food more than a few minutes after it was swallowed, and pain in epigastrium—symptoms strongly suggestive of organic lesion—diffused and severe headache, and was nervous and despondent.

Left eye: Constant pain, increased in pressure over ciliary region, without, however, particularly tender spots; anterior chamber shallow; iris faded in color, much congested and firmly bound down by posterior synechiæ; adventitious membrane occluding pupil; perception of light but no vision. Tension slightly increased. No reflex.

Right eye: Sharp pain at irregular intervals, for *three months*, with slowly decreasing sight; cornea clear; anterior chamber normal; lower two-thirds of pupilliary margin of iris adherent to capsule, (evidently an old iritis). V. $\frac{10}{cc}$. Snellen H_4 at 8″. Fundus normal. Tension normal, refraction myopic; slight pain on pressure.

CASE 2.—David Fisher, aged 29, three years ago received gunshot wound in left eye, resulting in total blindness. Since has had no trouble, excepting loss of vision, until two weeks ago, when eye became seat of severe pain; on admittance, general health excellent.

Left eye: Cicatrix in centre of cornea, probably entrance point of shot; posterior synechiæ, ciliary and conjunctival injection. Tension 2. Right eye V. $\frac{20}{xx}$ and normal in every respect.

The operation was performed in the amphitheatre of the Jefferson Medical College Hospital, before the class, by the Professor of Ophthalmology, Wm. Thomson, M.D.

The lids being separated by the elevator, the operator divided the conjunctiva and Fenon's capsule, between insertion of external rectus and corneal border, carrying cut well toward insertions of inferior and superior recti, as in Arlt's operation for enucleation. Then the external rectus was caught on strabismus hook, and brought plainly into view; but before division a catgut ligature, armed at each end with a needle, was passed into the conjunctiva and muscle, about four mm. from its insertion. Its division was made two mm. from suture, thus leaving on bulbus a tendinous stump, which was afterward used for two purposes, as a firm point of fixation for forceps during manipulations, and at the close of the operation to give attachment to the suture. The divided muscle was held out of the way by an assistant, by means of the two ends of the thread. The next procedure was careful division of optic and ciliary nerves, by repeated forward and cutting movements of the scissors. The final steps were sewing together the external rectus, cutting ligature close to knot, and replacing lids over somewhat protruded eyeballs. The after-treatment was cold water dressing and pressure bandage.

The two operations differ in no particular, excepting in the second case the hemorrhage was slighter and consequent protrusion less.

Immediate Results.—First case, anæsthesia of cornea, present on first day. Considerable pain and ecchymosis of lids, giving rise to analogous condition on unoperated lids. A striking instance of sympathetic irritation. The pain in right, which before the operation had been the source of much distress, disappeared in twenty-four hours, and the sight improved greatly, the patient being able to read Snellen $1\frac{1}{2}$, having previously read Snellen H_4. Some adhesions which before were unyielding to atropia were now torn off.

The effect of the operation upon the severe symptoms from which the patient had suffered was remarkable. Within a few hours the improvement in her condition was manifest; headache gone, stomach no longer irritable, pain in epigastrium subsided, appetite improved, and on the third day her strength had so increased that she was able to leave her room and present herself at the clinic. The nervous irritability and despondency had entirely disappeared, and the patient felt she had obtained a new lease of life.

CASE 2.—Total anæsthesia of cornea in less than twenty-four hours, the patient being unconscious when cornea was roughly touched with end of match stick. Slighter ecchymosis of lids than in first case, and no pain in eyeball—conditions which may fairly be attributed to his much better general health. On the second day, patient, feeling so well, left the hospital and has not since returned, so that further detail of the results is impossible.

The channel or channels through which the irritation from a diseased eye is communicated to its healthy fellow, has been for the past thirty years a matter of controversy. It is impossible, of course, within the limits of this paper, to discuss the arguments which have been deduced in favor of one or another theory, and it would be foreign to the subject, as they interest us only so far as they have a distinct bearing upon the operation. As early as 1844, Mackenzie refers to the possibility that all three hypotheses might be correct: the advancement of the inflammation through the vessels of the circle of Willis, through the ciliary nerves and through the retina and optic nerve. The progress of our knowledge

since his time is expressed by Mauthner (*Sympathetischen Augenleiden*, 1879, thus: "As to the nature and manner of the conveyance of sympathetic inflammation we know not much better than he (Mackenzie)." Later, Arlt declared, "whether in such cases the optic nerve (*e. g.*, its neurilemma, as far as the chiasm) is the active agent, or the nervous trigeminus and sympatheticus (ciliary nerves), in the present state of our knowledge we are not able to decide. The last is the more probable.

In 1857 Graefe said, "In order to arrive at certainty (whether the optic nerve participates in the sympathetic process of amaurosis), I have proposed in similar cases, instead of extirpation of the bulbus, to make section of the nervus opticus. This would have, among other advantages, that of retention of the bulbus. This proposal was, as far as I know, first introduced by Dr. A. Weber, of Darmstadt." In 1866 the modification of his views is apparent by his advocating "extraocular section of the ciliary nerves, in order that the vessels also be divided." The most forcible objection that has been urged against the neurotomy is reunion of the divided ends of the optic and ciliary nerves, and consequent return of sensibility to cornea and ciliary body, with renewed danger of sympathetic ophthalmia. Schœler, one of the greatest advocates of the operation, admits that the divided ends may grow together, but does not admit that such a reunited nerve is capable of conveying sympathetic irritation. Schweigger, in order to overcome the objection, has proposed the removal of a section of the optic nerve, "neurectomy," but although this may lessen the danger of reunion, it does not completely remove it, for the instances are not few which demonstrate that, in other parts of the body, after section of a piece of nerve, 2–3 cm. in length, the divided ends have reunited. The writer believes that equal if not greater certainty may be obtained by sewing forward the orbital portion of the external rectus muscle of the conjunctiva at corneal edge, instead of to the tendon, thus causing inward displacement of bulbus extremity of optic and ciliary nerves. Mauthner in concluding the discussion of the subject, says, "The operation must be further tried and improved before it can with full confidence be substituted for enucleation.

LOUISVILLE COLLEGE HOSPITAL.

SERVICE OF PROF. DUDLEY S. REYNOLDS.

Reported by A. H. KELCH, M.D.

Astigmatism.

CASE 1.—Miss Eddie G, aged 15, a pupil in one of the ward schools. She has suffered since the beginning of the present session, last September, with difficulty in attempting to pursue her studies at night. The family of which she is a member are in humble circumstances, and when she returns home, at two o'clock, her services in the household are needed; she therefore depends, of necessity, upon her ability to study her lessons at night, and this she is now no longer able to do.

Her eyes become red and smarty, feeling as though she had sand in them; presently the tears flow and the letters are so completely obscured that it is no longer possible for her to read. She has become quite nervous and suffers from sick headache, though she is of vigorous growth, well nourished, having a blush on her cheek equal to the best appearance of Hebe or Euphrosene in their palmiest days. She is unable to recognize any of the test letters in Snellen's graded scale at the distance of twenty feet. She should be able to read the bottom line upon the card, if she had normal vision.

She is now, as you observe unable to read at twenty feet what the normal eye would recognize at two hundred feet. She has been using a four grain solution of the sulphate of atropia for about two weeks, and we hope to find her accommodation fully suspended. On placing a positive glass, numbered 10, and which, as you understand, has the power of converging light to a focus at ten inches from the centre of the lens, she reads $\frac{20}{LXX}$. On placing Donders' stenopaeic disc before her right eye and closing the left she sees, when the slit is held vertically before the eye, $\frac{20}{XXX}$, with $+\frac{1}{8}$; reversing the disc so as to allow her to see in the horizontal meridian only, she reads $\frac{20}{XXX}$, and there is no glass in the whole case which will further improve her vision in this meridian. Testing the other eye we find vision in the vertical meridian, without any glass, equal to $\frac{20}{L}$. In the opposite meridian $+\frac{1}{8}$ gives her an equal amount of vision. The vision of this eye cannot be raised above $\frac{20}{L}$, while in the opposite eye she can with some difficulty read $\frac{20}{XXX}$ with $+\frac{1}{8}$. We, therefore, order for her $+\frac{1}{8}$ c ax. 90°. On placing these lenses before her eyes, she reads with great ease and comfort $\frac{20}{XXX}$, and she can make out a few letters in the lower line, which shows that her vision is but little less than normal. The want of perception, or the obtunded sensibility of the retina, is, no doubt, due to the fact that she never yet had light focused in the retinal substance. As she is young, we may reasonably expect that she will, in a short time, be so improved in her powers of perception as to make her vision absolutely normal, with the aid of these cylindrical lenses.

This is an unusual degree of astigmatism; it is extremely rare to find a person with an astigmatism equal to $\frac{1}{8}$, but we have demonstrated that in the right eye it even equals $\frac{1}{4}$. With these glasses, which she is to wear all the time, she will enjoy the power of reading and pursuing her ordinary studies with ease and comfort, after a very brief experience in their use. I confidently expect that she shall no more be tormented by local discomforts in the eye or by the sick headache, and that this nervous agitation will almost immediately vanish.

These cases are by no means rare. They are observed daily in practice, and you are likely to encounter them early in your professional career. You ought to remember that defects of refraction in the eye often give rise to a train of symptoms hitherto attributed to some obscure diseases of the brain, and, by some of the old writers, they were supposed, in many instances, to arise from

some derangement of the uterine function, or from disturbances of the digestive functions.

By the labors of Donders, more than by those of any other one man, the happy solution of this class of difficulties has been reached. However much may be said in opposition to the division of the practice of medicine into specialities, the art of healing has been enriched by the addition of some of the most brilliant triumphs of scientific medicine through the labors of the ophthalmologist. If ophthalmology had done no more than discover the means of relief from these hitherto perplexing disturbances of the nervous system due to errors of refraction, it would be entitled to live forever in the memory of an afflicted world.

Now a word about the manner in which we record defects of refraction. You remember we have registered the acuity of Miss G's vision as being equal to $\frac{20}{xxx}$. It may be asked "why do you employ this irregular fraction, why not reduce it so as to make it read $\frac{2}{3}$?" I answer that in calculating the acuity of vision the distance at which the observation is made is always taken as the enumerator of the fraction whose denominator is represented by what the patient actually sees at that distance. Miss G. sees at twenty feet what she should see at thirty; we register, then, $\frac{20}{xxx}$, which is in fact the exact acuity of her visual perception. If we reduce the fraction to its simplest form, we might for the time being understand all about the scientific principles involved in the test, but by to-morrow we should most likely forget what the original characters were from whence we obtained this simple fraction. In other words it is the rule, in fact, a principle of science, that in testing the refractive powers of the eye we make use of the distance at which the test is made, always as the enumerator of a fraction whose denominator is represented by the acuity of vision possessed by the eye under examination.

It is therefore readily seen under just what circumstances this result has been obtained, and its actual scientific value may be understood by any person reading the memorandum so taken. Now, for instance, if I test the vision for parallel rays of light in a suspended condition of the accommodation, and find that the patient is able to read without any glass at all $\frac{20}{c}$ and I reduce this fraction to $\frac{1}{3}$, which is its simplest form, it would appear that the patient's visual perception was but $\frac{1}{3}$ of what it should be, when, in fact, it may be absolutely perfect, the difference being that whereas the patient sees perfectly at five inches from the face, being able to recognize objects which are, perhaps, not distinctly visible by the normal eye, he has, by virtue of an excessive power of refraction, an inability to so relax that power as to enable him to unite parallel rays of light. This rule applies with equal force to the hypermetrope and the myope, both of them, perhaps, having normal acuity of perception, and both of them having errors of refraction, which, if the vision be tested at a particular distance, unfavorable to the eye examined, would make it appear that there is some organic deficiency of the visual power. Then, you are to understand that the nature of your test and its value may be known by your strict observance of the rule. When a person says the patient's vision is $\frac{2}{3}$ of normal, you will recognize the statement as coming from an ignorant and incompetent observer; because there are no means of dividing the visual power by such simple fractions.

In making a prescription for spectacles, you should always be particular to state the character of the refracting surfaces of the lenses ordered, in plain mathematical characters, and state what the distance shall be between the centres of the pupils, remembering that the distance between the pupils will be $\frac{1}{4}$ of an inch less when the eyes are directed to near objects, than for distant vision. The amount of curvature in the piece that is to lie upon the nose, as well as the general character of the frame, should be definitely stated. The patient should be made to understand that the optical axes of the lenses and of the eyes before which they are placed should always correspond. That it is seldom possible for the plain frames to be placed with the bows down upon the ears and secure satisfactory relations of the spectacles to the face for reading. The popular styles of what are called eye-glasses are nearly always a source of discomfort to those who wear them; they do great harm, by creating muscular strain, from the want of proper adjustment. Lenses in lorgnette or eye-glass frames can never be made to lie in the same place, and they therefore tax the eyes greatly to overcome this want of harmony in the adjustment of the glasses.

Mrs. M., aged 50, you will remember, was the subject, several weeks ago, of a very painful distention of the right tear sack. She had, years ago, an obstruction in the nasal duct, which was overcome by dilatation with Bowman's probes. The operation was begun by slitting the inferior canaliculus with Weber's knife, followed by the daily passage of Bowman's probes, until all inflammatory symptoms disappeared. The eye remained well for two or three years, when she contracted a nasal catarrh, which, by continuity of structure, extended through the nasal duct into the tear sack, and rekindled a muco-purulent inflammation, which brought her to the clinic a few weeks ago. Examination showed, on her return here, that the inferior canaliculus had become entirely closed; the old stricture at the superior extremity of the nasal duct had again appeared, and the sack was filled with muco-purulent material, the tears overflowing the lid and running down upon the cheek. Now, as it was impossible to pass a probe through the inferior canaliculus, on account of its closure, I enlarged the superior punctatum, and attempted to pass a probe into the nasal duct. I introduced Bowman's probe, No. 4, into the tear sack, without difficulty, but immediately on engaging the orifice of the nasal duct, it met with a firm obstruction, which I was not able to overcome without the employment of what I deemed unwarrantable force. I therefore injected a five-minim solution of carbolic acid to the ounce of water, through an Anel's syringe, into the tear sack, washing out all the morbid accumulations, and the next day renewed the attempt at dilating the stricture in the nasal duct; and so on, from day to day, until finally, on the fourth day, a No. 4 probe passed. The next day No. 2 was the

largest that would pass at first, but by withdrawing this and introducing a grade larger, I was finally able to pass No. 8.

She appeared to recover after this, without further trouble. In two weeks the eye again began to water. She was not in the city at the time, and so did not see me until four or five days later. I then found the stricture in the nasal duct had returned, though there was no morbid matter in the tear sack. I divided the superior canaliulus and persisted in my efforts until a No. 6 Bowman's probe again passed through the stricture in the duct. I introduced then a stylet of silver the size of a No. 6 probe. She wore this until I could have a gold style, with a "shoe-flange" at the upper extremity, constructed for her. This style is seven-eighths of an inch long; I slipped it over a No. 4 Bowman's probe and introduced it through the upper passage into the tear sack, and passed it on into the nasal duct, until the flange was lodged in the slit of the upper canaliculus. I then withdrew the probe, and pressing upon the flange, left the style in the position you now see it. She has now worn it nearly a week, and there is no sign of discomfort, no more overflowing of tears, no more swelling from accumulated matters in the tear sack, and I confidently expect Mrs. M. to remain well for at least a long time to come. I have known persons to wear these gold tubes in the tear passage for a period of twelve years, without suffering inconvenience. There is now a young lady in society, in this city, who has worn one for more than ten years, and if you should meet her, you would not suspect that she had ever had a weeping eye, save that which might have been caused by disappointment in love.

Mrs. C., aged about forty, lives in the eastern part of the city, on Payne street, which runs very near the Newcomb Buchanan distillery, on Bear Grass creek. This is a very sluggish stream, full of organic matter of the most offensive kind, coming from more than a score of pork houses and distilleries situated along its banks. If you were to visit the neighborhood, which is known as "Jerusalem," you would be obliged to hold your nose and employ some rapid method of transit to hasten through the foul section, whose odors, we have been told by a member of our local Board of Health, "Cry to the very heavens," in piteous strains, for some kind of relief to the populace from these death breeding gases. She has a complicated affection, a blepharitis papillosa of long standing, and now she suffers from acute trachoma. Trachoma, according to Mr. Marston, is an infallible sign of that form of malaria which produces intermittent and remittent types of fever. Trachoma begins in an abnormally rapid proliferation of the connective-tissue-cell contents of the conjunctival membrane, in fact, I may say of mucous membranes generally, as you will often find them in the nasal membrane, in the pharyngeal membrane, where, strangely enough, their presence has led to the absurd term follicular inflammation.

This condition, called trachoma, rarely produces any inflammatory action in the affected membrane. It frequently exists for months in the same membrane without giving rise to anything akin to inflammation, and you will often see it in an otherwise sound structure. The disease presents the appearance of a granulated surface. On closer inspection it is found that the elevations upon the surface are ovoidal in form, seem transparent, amber tinted, and look some what like small eggs, about the size of rice grains, deposited in the substance of the mucous membrane. These ovoidal bodies are the greatly distended connective tissue cells, and when a number of them lie together, present the appearance of gland substance; hence their appearance in certain mucous membranes has given rise to the term "*adenoid tissue development.*" They are veritable neoplasms when found aggregated in large quantities in the mucous membrane. They neither break nor do they shrink in size. No local treatment except mercury in some form has ever been known to hasten their disappearance. They may occur in an inflamed as well as in a healthy mucous membrane.

In Mrs. C's conjunctival membrane, the papillary layer of which has for a long time been hypertrophied, these bodies are now found in the retrotarsal fold, and upon the surface of the globe; a few of them may be seen near the free border of the lid. In fact, they are interspersed along with the hypertrophied papillæ. Her pulse is quick and feeble, her skin cold and clammy, her tongue pale and flaccid, with the prints of her teeth upon its margins, and she complains of quotidian attacks of the headache; she is constipated and has no appetite; she is a poor woman, and earns her living at the wash-tub. Let her have five grains each of calomel and chlorate of potash, immediately, as an aperient, and give her one drachm of quinquinia, divided into twelve powders, one of which she is to take before each meal, until the whole are taken. You observe I make a direct application of the crayon of muriate of ammonia to the everted lid, this with the view of promoting the resorption of plastic material deposited in the papillæ, and without any anticipation of changing the form or character of the trachomatous deposit. She is to have, as a soothing application, a solution of borax (gr. 5–$\frac{ʒ}{ʒ}$) a small portion of which may be dropped into the eyes every hour or two, when they feel uncomfortable. We hope by the improvement of her general health from the effects of the quinquinia, that the disease will be abated, and that she will again be able to earn her living. Of course this papillary disease in the eyelids cannot be cured unless she could spare time from her labors, but that is no reason why we should not attempt to alleviate her sufferings.

My friend, Professor Seely, of Cincinnati, has written a great deal in the medical journals, particularly in the Cincinnati *Lancet and Clinic*, during the last few years, on the subject of the local treatment of acute trachoma. He talks about the discharge from the surface, as though it were usually attended by some inflammatory action in the membrane, and he seems to rely entirely, or nearly so, upon local treatment. Now, I quite agree with my friend, as to the damage usually done by caustic applications in this form of disease. I agree, also, that the ointment, which I think he will find was first recommended by Mr. Earnest Hart, editor of the *British Medical Journal*, is a precious thera

peutic agent in the chronic forms of trachoma, complicated by catarrhal or phlyctenular disease. The ointment used is the yellow oxide of mercury, in the proportion of about three grains to the half ounce of glycamil or vaseline. It is very important that the mercury should be thoroughly rubbed with the menstruum, so as to insure a uniform distribution.

I dislike to take issue with my friend, of Cincinnati, but I beg to assure both you and him that my cases of acute trachoma recover quite uniformly without any local treatment whatever, by the bare use of full doses of the sulphate of quinine, always taking the precaution to administer a purgative beforehand. I have the notes of several hundred cases of acute trachoma, many of them treated at this clinic with the sulphate of quinine and without any local treatment, and I think I might with pardonable pride point to the almost uniform result of that treatment. I cannot understand how a disease which every one recognizes as one of the manifestations of marsh miasm, or malaria, as we call it, can be removed by the purely local treatment of its manifestations in the conjunctival membrane, without regard to the general systemic affection, though it may be masked, or of such mild form as scarcely to be recognized.

Medical Societies.

PHILADELPHIA LARYNGOLOGICAL SOCIETY.

A stated meeting of the Society was held at the house of Dr. Jos. B. Potsdamer, 1428 Poplar Street, February 25th, 1881. The meeting was called to order at 8.30 P.M. The President, Dr. Cohen, in the chair. Members present: Drs. Cohen, Smith, Barton, McCracken, Sajous and Potsdamer.

Minutes of last meeting read and approved.

Dr. Cohen described a case of ozæna in a girl at puberty, in which the lower turbinated bones were lost, giving a full view of the middle turbinated bones, and enabling him to examine the entire surface of the diseased process, in a manner absolutely out of question under normal conditions. The doctor stated that this case illustrated the difficulty of properly cleansing the nasal passages, even with a douche.

Dr. Sajous exhibited a case of paralysis of the posterior crico-arytenoid muscles, with thickening of the posterior wall of the pharynx on the right side, shutting out from sight the pyriform sinus on that side. This patient, when he first came under treatment, had very little breathing space, the vocal cords being almost in apposition, but he has improved markedly since, under the influence of increasing doses of iodide of potassium. When this man drinks any liquor his cords become congested, and they are brought nearer together. Electricity has been used without producing spasm, but was of no benefit. Dr. Cohen suggested linear counter-irritation over the region of the pneumogastrics in the neck.

Dr. McCracken then read his paper on Acute Catarrhal Tonsilitis. The doctor stated that he meant by this acute inflammation of the mucous membrane and follicles of the tonsils. He called attention to two forms of the disease, to wit: one in which abscess does not form and the other in which it does.

The subject of tonsilitis was then discussed by the members present. Dr. Cohen stated that in treating these cases if the patient could submit quietly he coated the whole tonsil with solid nitrate of silver.

Dr. Barton exhibited some lozenges for use in catarrhal sore throat, suggested by him to replace the mass long used in the throat clinic of Jefferson Med. Coll. Hospital, and from which the patient broke off, from time to time, as much as was required. He had added powdered rose leaf to the formula, by means of which he has been able to secure a good mass for a lozenge The formula is as follows, to wit:—

℞.	Tr. capsici,		m½	
	Acid. sulphuric. aromat.,		mj	
	Confectio. rosæ,			
	Folia. rosæ,	āā	gr. j	M.
	Ft. troch. No. j.			

It was then decided that the next meeting of the society be held at the house of Dr. Isaac Barton, 128 S. Fifteenth street. The Doctor was appointed essayist of the evening.

On motion adjourned.

Jos. B. Potsdamer, *Secretary, pro tem.*

Editorial Department.

Periscope.

Sudden Death in Pleuritic Affections.

Dr. Leichtenstern (*Deutsches Archiv für Klin. Medicin.*, Band iv, 4 Heft) discusses a number of cases recorded in medical literature, of pleuritic patients in whom severe syncope and sudden death have occurred, with the view of explaining the causes; and he arrives at the following conclusions. Sudden death or severe attacks of syncope in cases of pleuritic effusion have sometimes their origin in embola of the pulmonary arteries. In other cases, no pulmonary embola exist, but voluminous and far-extending thrombi in the right auricle and ventricle, and in the superior vena cava. The generally prevailing view that left-sided effusion has a greater effect in disturbing the circulation than effusion on the right side, is incorrect. On the contrary, extentensive exudation on the right side causes greater disturbance of the circulation by pressure effect in the large vessels, and on the right auricle and ventricle than does considerable effusion on the left

side. And the opinion that cases of sudden death and severe syncope are more frequent in left than in right exudation, is contradicted by statistics. Of fifty-two cases, in thirty-one the exudation was on the right side, and in twenty-one on the left. Cases of sudden death, apoplectic attacks in pleuritic effusion, sometimes arise from embolism of an artery of the brain, or its consequences. In a great number of sudden deaths with pleuritic exudation, we are not yet in a position to explain the cause. The fatty degeneration of the muscles of the heart, the anæmia of the brain, and the œdema of the lung, do not suffice for an explanation. To anæmia of the brain as a cause, those cases only can be assigned in which the raising of the sick person from the horizontal position has been followed by severe syncope ending in death. Various causes which sometimes quite interrupt or impede the flow of blood to the left heart, such as a severe paroxysm of coughing, vomiting, lifting heavy burdens, may give rise to a sudden fatal anæmia of the left heart, and secondarily of the brain. The anæmia of the lungs or brain found in many cases is only of secondary importance. It frequently happens, after thoracentesis with aspiration, that an anæmia is induced in the partially distended lung; and this may lead to death by asphyxia. In sudden death, during or immediately or a short time after thoracentesis by aspiration, the cause is anæmia either of the heart or of the brain. In cases in which severe syncope and sudden death are observed during the irrigation of the pleural cavity, the cause is either direct mechanical concussion of the easily exhausted heart by the stream of water thrown in, or shock. The washing out of large empyemic cavities with strong solutions of carbolic acid may cause severe collapse, and perhaps death, due to the rapid absorption of large quantities of the acid.

Iodoform in Chronic Nasal Catarrh.

Dr. H. A. Eberle, of Iowa, writes to the *Michigan Medical News*, of January 10:—

In this State, where catarrh is so prevalent among the people, any remedy that would perform a cure will be hailed with the greatest delight. Iodoform, as a remedy for chronic ulcers, was used quite extensively in the Montreal General Hospital in 1872 to 1876, with such good results as to warrant its trial in private practice. Since that time I have made use of it in very many ways, in the treatment of piles, fissures, granular ulcerations of the uterus, etc., and always with gratifying results.

In view of all its healing properties, I was led to adopt the remedy for the treatment of catarrh, and as I had been a sufferer from the disease in a chronic form for many years, and had used many preparations with varying success and little benefit, I concluded to make use of it in the following manner. First, an ointment is made, thus:

℞.	Iodoform, finely powdered	grs. lx
	Ext. geranium, solid,	grs. x
	Acidi carbolici,	gtt. xv
	Cosmolinæ, q. s.	℥j. M.

Secondly, bougies are made out of absorbent cotton saturated with the above ointment and simply introduced up the nasal passage as far as necessary at bedtime. These are left in all night and are easily removed in the morning by blowing the nose.

This is repeated for a week or ten days, when the most obstinate case of catarrh will yield to the treatment. Scarcely any other treatment is necessary, except the occasional use of the posterior nasal douche with some cleansing fluid. I usually employ a weak tepid solution of chloride of sodium before introducing the "iodofodized cotton" tent.

Treatment of Chronic Prostatic Enlargement.

Mr. Thos. Smith, surgeon to St. Bartholomew's Hospital, in a recent lecture published in the London *Medical Times and Gazette*, gives the following advice on the above subject:—

Treatment.—Your assistance will rarely be sought in the early stages of this disease; but should you be consulted by an elderly patient suffering from undue frequency or difficulty in micturition, it will always be prudent to make a digital examination through the rectum, to ascertain the condition of the prostate. The examination is best made with the patient lying down on his back. Your finger-nail being filled with soap, and the finger well oiled or greased, it should be introduced very slowly, so as not to excite spasm of the sphincter.

Should you judge that the urinary difficulty is caused by prostatic enlargement, the occasional passage of a full-sized instrument will often relieve the inconvenience, and, if steadily persevered in at regular intervals will generally secure the patient against all the more serious consequences of the disease.

In cases where the difficulty in micturition has gone on to produce an inability to empty the bladder completely, it is of primary importance that at least once in the twenty-four hours the urine should be all drawn off; but in carrying out this plan it is necessary to exercise caution, lest by suddenly emptying a greatly distended bladder you should produce a complete paralysis of the organ, with a loss of the power of voluntary micturition, and cystitis.

As a general rule, if there be not more than one pint of retained urine in the bladder—that is, urine the patient is unable to pass for himself, it may be safely drawn off at once. But if there be more than this of residual urine (and there may be several pints), you should draw it off by installments, taking away a little more each day, until the bladder is completely emptied.

This complete evacuation of the bladder, when once accomplished, should be repeated each day, by means of an instrument, and for the purpose an india-rubber catheter, a bulbous-ended or a Coudé catheter, should, if possible, be used.

By these means, in an early stage of the disease, the patient will generally regain the power of normal micturition, or at all events, if this result be not attained, he will be secure from the worst consequences of the disease.

The treatment may be carried out by the patient himself if you will be at the pains to teach him how to pass an instrument—nowadays a comparatively simple process, owing to the great

improvements in catheters; for you should know that since the introduction of the various forms of soft catheters now in use, the instrumental treatment of prostatic enlargement has lost more than half its terrors and much of its danger.

This large silver prostatic catheter which I now show you—at one time almost the only instrument used in these cases—is truly a formidable weapon, with its long shaft and wide-sweeping curve. It was constructed to ride over the prostate, but in the hands even of experienced surgeons it frequently failed in the performance of its normal functions, and rode under the gland, or through its substance. Used with a strong and steady hand it rarely failed to draw off water. As an instance of its powers in this respect, I may mention a case within my knowledge where a prostatic catheter in the hands of an energetic surgeon drew off some gallons of water, which, however, a post-mortem examination disclosed to have come from the peritoneal cavity.

I will suppose now that you are called upon to treat a patient with retention of urine dependent upon enlarged prostate. The difficulty will usually have come on at night time; the patient will, as a rule, be advanced in years; and the prostate can be felt in the rectum unduly prominent. In such a case let me advise you first to try a flexible red rubber catheter, of full size; it will often find its way round a corner, and through a urethra which would be impervious to a more rigid instrument. This failing, you should try and pass the same catheter with a stout wire stylet reaching two-thirds of the way down the instrument; this gives you more power to push the catheter onwards, and leaves the end flexible, to accommodate itself to the distorted urethra.

Next in order you may try the Coudé catheter, which I show you: then, if necessary, the bulbous French instrument, a gum-elastic, without and with the stylet; and lastly, others failing, a silver instrument.

Whatever instrument you use, let it be a full size; it will go in as easily as a smaller one, and is less likely to damage your patient. Keep the point of the instrument on the upper wall of the urethra; and, above all things, use no force.

After drawing off the water in a case of retention, the patient will, for a time at least, require the regular use of the catheter until he recover his power of voluntary micturition; and should there have been great difficulty in introducing the catheter, I should advise you to tie it in for the first twenty-four hours.

In the subsequent treatment of these cases of prostatic retention, in addition to other troubles, you will often have to contend against an increasing frequency in micturition. The frequent desire to pass water must be resisted as much as possible by the patient, or it will grow upon him. The bladder must be completely emptied, and, if need be, washed out, at regular intervals, and the patient exhorted not only to resist by a strong effort of the will the solicitation of his bladder, but to avoid all sights and associations that are likely to suggest to him the necessity of micturition. With this object in view, you should counsel your patient to keep his catheter and chamber-utensil out of sight; as soon as possible to leave his bed-room during the day; and to occupy his mind by any pursuit which may draw his thoughts away from his urinary necessities.

Ulcerous Endocarditis.

Dr. Barie, quoted in the London *Med. Record*, gives the following case of this disease:—

The patient, a female, had had three children, the last four and a-half months before admission, the labor having been normal and followed by no accidents; the child was strong and healthy; she suckled it. Five or six days before admission she suffered from indisposition, loss of appetite, pain in the back, and slight diarrhœa, but continued at work till the night before admission, when she had an attack of the 'nerves,' with loss of consciousness. On admission there was a little fever (100.7° Fahr.); there was redness, swelling, and pain of the two wrists and the right shoulder. For twelve days there was little change. Suddenly, one day at 3 P. M., the patient was seized with rigors, fever, and nausea; at 5 P. M. the temperature was 104.7° Fahr., pulse 120. She complained of sharp lumbar pains with tingling in the lower limbs; these latter were moved with difficulty, but sensibility was intact. The next day her state was worse; the pain in the wrists was gone, but there was complete paraplegia. On the right, the limb was absolutely inert, cold and cyanosed, with anæsthesia and analgesia from the upper fourth of the thigh downwards; no reflex movements. On the left, the paralysis was less absolute, the cyanosis and coldness less complete, and the alterations of sensibility reached only as high as the lower fourth of the thigh exclusively. There was no pulsation in the arteries of either paralyzed limb; on pressing the abdomen, no arterial pulsation could be felt, but severe pain was produced, which extended from the umbilicus to a little above the pubes, but this was only when pressure was in the middle line. She died six days afterwards; gangrene of the lower extremities had commenced. At the necropsy there were found a thrombus obliterating the mitral orifice, and ulcerative endocarditis of the posterior surface of the left auricle and of the mitral valve, and some atheroma of the aorta, which at the level of its bifurcation was plugged by a fibrinous clot prolonged into the right iliac for 3 centimeters and into the left iliac for 1 centimeter. There were no other coagula; the arteries of the brain were normal. The spinal cord was congested in the lumbar region; it presented no histological alteration, except this congestion.

The Antispasmodic Effects of Alcohol.

In the London *Med. Press and Circular*, January 12th, Dr. Benjamin W. Richardson, equally distinguished as a physiologist, physician and temperance advocate, gives the following case illustrating the use of alcohol as an antispasmodic:—

R. S., clergyman, aged thirty-six, feels weak, memory enfeebled, vertigo, great loss of power in the loins and muscles of the lower extremities, he imagines he must fall. His face is pale; his

extremities are always cold; his bowels constipated; the evacuations of clay-like color, being sometimes firm and hard, and at other times fluid and resembling yeast. The urine, copious and pale, has a sp. gr. of 1.018, but is free of albumen. The respiratory sounds are clear. The pulse is sixty-eight, and the three sphymophonic indications are present, but it is so thin and small it is scarcely perceptible at the wrist. The heart sounds are clear, but with an occasional soft murmur at the base on the right side. The impulse of the heart is intense, and is described by the patient as a "persistent palpitation." In this case I commenced the treatment by carefully regulating the diet and regimen, withdrawing tea, and enjoining less work. As the patient was neither a smoker nor a drinker of alcohol in any form, I encouraged him to maintain abstinence in those respects.

The symptoms in these examples all point to the one deranged condition. There is an irritation, so to speak, extending through the whole of the arterial system, by which the resistance to the flow of blood through the body is impeded. This leads to a temporary impairment of nutrition, and to central nervous exhaustion. In plain terms, there is spasmodic peripheral resistance from an irritation which is felt by the heart itself.

In these cases, if attention be paid to the secretions as a preliminary; if the mind be relieved, as far as is possible, from worry; if daily exercise be enjoined, with early hours for going to bed; and if full quantum of sleep be secured, the symptoms often pass away without other aid; but this is not always the case, and when the phenomena continue, alcohol with amyl nitrite, judiciously administered for a short time, is of signal service.

In the case I have recorded I prescribed first nitro-hydrochloric acid, with tincture of nux vomica and infusion of gentian, together with an alterative. This not succeeding, I prescribed iron and quinine (Easton's syrup). After some few weeks' failure—accepting the case to be one of the class described above—I ordered

℞.	Amyl nitrite,	♏ ij
	Alcohol, sp. gr. .830,	ʒ iij
	Liquid taraxacum,	ʒ ij.

To make a dose to be taken three times a day, in a wineglassful of water, after food.

The result of this treatment was immediate. It was like the result of an experiment. On the visit of the patient to me, a week after the treatment had commenced, the pulse was full and soft, the heart's action was quick, the bowels were acting regularly, the mental activity had greatly improved, the body was of natural temperature and the pulsation was much improved. At first the medicine produced some flushing and throbbing of the temples, but this passed away after two or three days, and in the course of a month the health was quite restored, on which the medicine was withdrawn. For fourteen months this patient has, I find, continued well, remaining still a total abstainer from alcoholic beverages. He is now doing his full share of professional work.

Another class of cases resembling the above is often met with, in which there is dryness as well as coldness of the skin, attended with lepra or psoriasis. In these persons there is, as a rule, a syphilitic history, acquired or inherited. In them the action of the heart is intense, with a feeble pulse and nervous exhaustion. These are benefited by alcohol in properly administered doses. I usually prescribe for an adult in such examples—

℞.	Liquid arsenite of potassa,	♏v
	Pure glycerine,	ʒj
	Alcohol, sp. gr. .830,	ʒ ss
	Distilled water,	ʒj.

To be taken in half a tumbler of water three times a day, after food. In some instances I also add to this prescription two or three minims of the nitrite of amyl, and I have seen recovery, when arsenic alone has failed, commence immediately on the addition of the antispasmodic.

Bladder Drainage in Chronic Cystitis.

In the course of an address before the Medico-Chirurgical Society of Edinburgh, Mr. John Chiem said:—

Let me particularly direct attention to bladder drainage in chronic cystitis. It will, I think, take a most important place in the treatment of that troublesome and common affection. The two great symptoms are frequency of micturition ("irritable bladder"), and excessive quantities of mucus in the urine (catarrh of the bladder). The first symptom is at once relieved by the use of the instrument, and in some cases its use even only during the night gives the patient unspeakable comfort; but in the majority of cases it is best kept in the bladder continuously. The difficulty is the choking of the instrument with mucus; this will be prevented by having a double eye in the catheter, and by raising the bottle night and morning, in order to make a back flow, which clears the instrument. The patient can very soon tell when the flow ceases, and the bottle can then be raised slightly above the level of the patient. At once the plug of mucus is displaced. It is very interesting to observe the effect of rest to the bladder as indicated by the decrease in the quantity of mucus. In one case of perineal fistula, complicated with chronic cystitis, this improvement was very marked. The systole and diastole of the bladder are excessively increased in irritable bladder. No heart would stand such an increase in its pulsations. This, in my opinion, is one of the reasons why chronic cystitis is so intractable, and any means by which we can prevent the periodic rise and fall of the bladder, the incessant unrest of the organ, will always be of the greatest value in relieving inflammation of the viscus. For its value in chronic cystitis alone I would be inclined to recommend a careful trial of bladder drainage. By some means or other let it be carried out; the method matters not. What is important is to come to a conclusion as to the value of the principle involved. Its main value in chronic cystitis, in my opinion, is to give the bladder rest. It acts as a drainage-tube in a wound or in an abscess cavity. It has, however, a value

in urethral fistulæ; in those requiring plastic operations it keeps the wound dry and allows speedy union to take place; in those requiring only that the urine which is abnormally passing along the fistulæ and keeping them open should be prevented from so doing, by being drained off immediately on its entrance into the bladder. *To give the bladder rest* and *to keep the urethra dry*, I know no better means than that which I now advocate. I am not aware that the idea of keeping up a constant suction power which draws off the urine as it drops into the bladder has been previously recommended in surgical practice. It is certainly a very different thing from the use of the catheter tied in and used in the ordinary way. That the means recommended are simple is self evident; they can be applied by any one. That no harm is done to the patient is the result of my experience; that all operations on the urethra are treated more certainly by the use of the apparatus, and that it is of great use in many cases of chronic cystitis, relieving the symptoms in all, and giving permanent relief in others. That the symptoms of chronic catarrh are in some cases very intractable is evident, when we remember that chronic cystitis has been treated by the lithotomy incision, in order simply to rest the bladder.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——A very thorough monograph on "Anomalies of Perspiration," is sent us by the author, Dr. J. H. Pooley, of Columbus, Ohio. He describes, from extensive reading and observation, the various forms of excessive, odorous, colored, bloody, urinous, phosphorescent and deficient sweat. Many very curious facts are collected and presented.

——The Annual Report of the Western Pennsylvania Hospital for the Insane has a number of statistical tables and an able report by Dr. J. A. Reed. He believes that insanity is and must be on the increase in modern life, and discusses the cause of this sad fact. He adds the interesting observation, that it is more strongly hereditary in the higher classes of society (p. 9).

——The 10th Annual Report of the Philadelphia Dispensary for Skin Diseases shows a total of 436 patients treated. The physician, Dr. H. W. Stelwagon, says:—

The diseases met with were, as a rule, of a decidedly chronic nature, and, in many instances, had been aggravated by the treatment of ignorant charlatans or by the use of one or several of the cure-all salves.

——The second of Morton's Pocket Series includes "Aphorisms in Fracture," by Dr. R. O. Cowling, of Louisville. The author has added the criticisms of three or four eminent surgeons, and as it now stands his work is a very complete and valuable one, embracing in brief the most definite and certain results of modern surgery. Published by John P. Morton & Co., Louisville. Price 25 cents.

——A strong plea for better nursing and home treatment of the insane is offered in a pamphlet entitled, "The First Requisites in Physician and Nurse, for the Cure of Insanity," by H. O. Ward, of this city. The author insists that higher wages should be paid nurses, in order to secure better ones; "a lady should be the nurse of a lady;" non-restraint is advocated. The writer seems to have had but little actual experience in the treatment of the insane.

——In a reprint from the Illinois State Medical Society Transactions, Dr. J. G. Hervey, of Grove City, describes a case of herniotomy, and one of extirpation of the parotid. Of the latter he observes:

Extirpation of the parotid gland was first performed in this country by Dr. Warren, of Boston, in 1798, and was afterwards generalized by Dr. George McClellan, of Philadelphia, who operated in eleven cases, of which ten recovered. This operation, although laid down by Gross and others as one of the most formidable in surgery, is in a large majority of cases rendered comparatively easy by the anatomical changes caused by inflammation, especially in cases of long standing.

——In a reprint sent us, Dr. T. S. Dabney, of New Orleans, reports sixteen cases of dropsy and Bright's disease, treated with tincture of apocynum, made from the fresh root, ℥j to ℥vj of alcohol, the dose gtt. v–xxx. In some cases this acted as a powerful aphrodisiac. The results were very good. He closes with these words:—

I have not pretended to state that the apocynum exercises any specific action in Bright's disease, but it is worthy of notice that in almost every instance where it was administered in that affection marked diminution of albumen and casts occurred; and in some instances every trace of both disappeared. Whether or not this remedy exerts any peculiar influence over Bright's disease, clinical facts do not allow us to state positively. The following advantages, however, possessed by the apocynum should commend it to all physicians:—

1. The small quantity necessary to produce free diuresis, emesis or catharsis.
2. Its pleasant, aromatic taste.
3. Its fine tonic properties, which compensate for the depression consequent on free catharsis.
4. Its harmlessness—an over-dose being speedily followed by free emesis.

With this remedy at our command, I conscientiously believe paracentesis to be in most cases unnecessary.

OUR EXCHANGES.

Harper's Monthly, Weekly, and Young Folks, come promptly, and are full of very readable matter. The contents of the March number of the *Monthly* are very attractive. Moncure Conway's "Bedford Park" is beautifully illustrated, and the University of Leyden, with its valuable portraits, excellent. The pen and pencil pictures of Albany and its Dutch settlement, and of the "Nation in a Nutshell," are pleasant reading. The novel of "Anne" increases in interest with each number. The illustrations of the last three numbers are especially fine. "Harper's Young People," is just the thing to please the children, and is finely illustrated.

Scribner's Monthly, for March, is very attractive and finely illustrated. Mrs. Hodgson's fascinating story of "A Fair Barbarian," is continued, with very interesting papers on "Copley, the Artist" and "Charles and Mary Lamb," accompanied by portraits of each, and several reproductions of the works of the great artist. Several other excellent papers make up an exceptionally attractive number.

St. Nicholas, for March, is very good. Illustrations excellent, and an unusually interesting table of contents.

Littell's Living Age is presenting an exceedingly interesting series of papers, with the third number of "Don John," by Jean Ingelow, and the tenth number of "Visited on the Children," from the Cornhill Magazine.

The American Agriculturist is a monthly of great value, especially to the amateur farmer and gardener.

Our exchanges of weekly and religious family newspapers are regular and excellent.

BOOK NOTICES.

The Human Body; an Account of its Structure and Activities, and the Conditions of its Healthy Working. By H. Newell Martin, D. Sc., M.A., M.B., Professor of Biology in Johns Hopkins University, etc. New York: Henry Holt & Co. Cloth, 8vo, pp. 621. Price $2.75.

This is one of the American Science Series, for high schools and colleges, which Messrs. Holt & Co. are publishing. It is, as its title denotes, a popular exposition of anatomy and physiology, as those sciences now are. Beginning with the general structure and fundamental physiological actions of the organism, the author passes to the blood, the bony and cartilaginous skeleton, the muscular tissues, and the motor functions, the nervous system, the heart, blood vessels and circulation, the secretory tissues and organs, the food and its transformations, the respiratory mechanism, nutrition, bodily heat, sensation and the special senses, adding an appendix, separately paged and indexed, on reproduction and development. This scheme is a philosophical one, well suited to the natural relations of the subject matter.

The style of the writer is clear and correct, and his presentation of his subject well calculated to interest in it the inquiring mind of the young. It is, perhaps, rather too extended and minute for a text book in ordinary classes, but to accompany lectures on these subjects it is very well adapted indeed. For the general reader who desires information, no better guide could be named.

The application of the facts given to hygiene is made frequently, and the advice is sound and free from hobbyism and platitudes.

Special praise should be awarded the publisher for the neat manner in which the volume is published. It has about one hundred and seventy illustrations, well cut, and some printed in colors; the print is of a size readily legible, and paper and binding will satisfy the most exacting; it forms a pleasing contrast to any of the older school books on anatomy and physiology, in all these respects.

Bodines; or Camping on the Lycoming. A Complete Practical Guide to Camping Out. By Thad. S. Up de Graff, M.D. Philadelphia: J. B. Lippincott & Co. Cloth. 8vo.

This work is the record of the actual experience of two ardent anglers, who, for a number of years, have spent the month of June camping out upon the banks of the Lycoming Creek, Pa., and enjoying the charming scenery which surrounds it. It is intended to bring the merits of this part of our country to the notice of the disciples of Isaak Walton, and also to give a number of practical hints how to prepare for camping out, and how to enjoy the time when in the woods. It is pleasantly written and neatly illustrated, and there is a good deal of solid instruction to the adventurous angler scattered through its pages. As the author is a physician, he very appropriately looks at his subject from the point of view of its healthfulness as well as its pleasurable features. In very many cases no better remedy for the exhaustion incident to the strong competition of modern life can be suggested than a month or two spent in the primeval forests.

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THE AFTER EDUCATION OF GRADUATES.

During the last few weeks a thousand or two new physicians have been added to the cohorts which already possess the land. They have entered the ranks of a profession where there are few vacancies, and in which it is peculiarly difficult to make a career by push and energy. It is a discouraging feature of this profession, that it hems and impedes the vigorous ambitions of youth, not only by the peculiarities of its self-made laws, but also by the strong opinion of the public, that mature years and long experience are essential to a complete physician.

How well provided are the majority of these young physicians, these neophytes of the profession, in the means of getting along? The question is a serious one for each of them. These requisites are in the first instance, a sound professional education, next, correct personal habits, thirdly, a sufficiency of resources to tide over the inevitably small income of the first few years.

That the education obtainable from the two years or even three years' course at our medical colleges is deficient, is acknowledged on all hands, That many a one is forced by circumstances to rest content with it, is true—too true; but those who have means or opportunity to extend it by a year in a hospital, or by engaging in a clinic or dispensary, should by all means do so. In no other way could the time be spent to more practical profit.

There are also certain branches of great advantage to the physician, in fact, quite indispensable to him if he intends to become profound in his knowledge, which he must study after graduation. One of the most prominent of these is *biology*, the doctrine of *life* in its broad sense. This is now pursued through botany and zoölogy, the sciences which are concerned especially with organic forms. It is not too much to say that almost any question in physiology or pathology analyzed to its elements, leads to the recondite laws of biology; investigations into the nature of epidemics, into the action of remedies, into the forms and functions of tissues, all lead up to the study of biology.

Intimately associated with this, as well as with clinical researches, is the art of *microscopy*. No one nowadays can expect to arrive at any distinction in medicine, unless he is well skilled in the use of that marvelous instrument, the microscope. The most wondrous operations of nature are hidden from men's eyes; they are performed in the dark, and concealed in the infinitely little. This instrument enables us to pry into these arcana, and discover the elemental forces at work in their simple forms.

It is unfortunate that for the study of these branches we are so little prepared, so inadequately equipped, in most of the medical schools of this country. This want was forcibly set forth in the opening lecture, by Dr. J. T. ROTHROCK, of the Auxiliary Faculty of the Medical Department, University of Pennsylvania, last week. In pointed terms he signalized the deficiencies for the higher education of physicians in the United States as a fact not creditable to our country and not in keeping with the wealth we possess and the liberal expenditures we make in many directions.

"So far," he said, "as any land fails to provide for the mental culture of the most aspiring student, it fails in its duty to civilization, and the students will seek that culture elsewhere. I am sorry to be compelled to state that America has fifteen hundred of such students abroad to-day, for whom no adequate provision has been made at home. No such exodus comes from Europe to our schools, because Europe offers greater facilities for study."

"The needed facilities are not necessarily expensive. Simple instruments, costing not more than $5000 or $6000, do all the work at Strasburg, Wurzburg, and other German schools. We need such laboratories here, and till we have them we cannot equal Europe, and every student who leaves these shores shows what we still lack of the true standard. The study of disease germs is very important, and is growing in importance and usefulness. No physican can know too much about it. To take an advanced stand he must be able to check the spread of disease. He must know enough of geology to comprehend the subject of the soils in drainage, and medical jurisprudence and toxicology are of the first importance; for how often he is called upon to give his opinion as an expert. Let him prepare himself to go into court with confidence, and do this even while knowing that life or death depends upon his evidence."

In Europe, he said, there is no such thing as classes, as they are understood in this country. The whole course lasts four years; a student, after the first examination, being allowed to practice, usually in the hospitals, and receiving his degree of M. D. only after an exhaustive examination and the production of a strictly original thesis. He cautioned the class against being, as a German professor pronounced his students, "so fearfully learned that they could not see what was right under their eyes." He insisted on the importance of the four years' course, and suggested that scholarships might be established by the alumni and undergraduates themselves.

Such suggestions as these are appropriate, and may be applied to all of our medical schools. In none of them are the facilities for such advanced studies as good as they should be. The reason does not lie in the lack of interest in scholars, but in the absence of financial support, and, in a measure, in the unwillingness of able men, who could make more in practicing, to devote their time to rather unremunerative abstract pursuits. In time, this will doubtless be changed. Satisfactory incomes will be granted to those willing to make such recondite investigations the main business of life; and the credit of discoveries and the benefit to be conferred by imparting such knowledge will overweigh the diminished financial success achieved.

There are other directions in which the graduate may extend his education with much profit, and thus fill in the hours he is doomed to spend waiting for his patients. If he is not acquainted with French and German, he may readily acquire either or both. It is no harder, and costs no more money—not so much—to learn German, as to learn to play a fair game of billiards; and so far as we have observed, it is equally pleasurable

and more useful. In many localities it gains patients as well as opens a new source of professional improvement.

Notes and Comments.

Cavazzini's Case of Gastrectomy.

In gastrectomy a part of the stomach, generally at the pylorus, is excised, on account of cancerous deposit. M. Petit, in *La Revue des. Sci. Med.*, Paris, Oct., 1880, cites several experiments of Czerny, where annular or oval portions of the stomach were excised in animals, recovery taking place after the operation; the entire stomach was removed in a dog, which lost flesh at first but subsequently (nine months later) had regained its flesh.

The operation has proven very fatal in the human subject, and has been performed but a few times. M. Pean performed it for a cancerous tumor confined to the pyloric region of the stomach.

Although the operation was performed with every antiseptic precaution, the patient succumbed four days later, notwithstanding that two transfusions of blood had been made.

Langenbech performed the same operation for cancer; it was found necessary to completely extirpate the pyloric portion of the stomach and unite the organ with the horizontal portion of the duodenum (*Deutsch. Med. Woch.*, May 15th, 1880).

In Cavazzini's case the stomach was opened at first unwittingly. A young woman of twenty-seven seemed to be in excellent health and had given birth to three children; after the birth of the last she commenced to suffer from pain in the epigastrium, which, though intermittent, became finally insupportable, inducing anorexia, vomiting and insomnia.

The pain was seated in one point where there existed a small and very hard tumor, about three and a half to four centimeters in diameter. This was considered to be a fibro-cartilaginous growth developed in the aponeurosis of the rectus muscle. Every means of relief, injections of morphine, atropia, etc., were unsuccessful, and the patient commencing to lose flesh, an operation for the removal of the growth was determined on. An incision was made over the tumor and the skin carefully dissected back; in cutting about the tumor a cavity was suddenly entered which proved to be the stomach; the anterior of the parietes of the organ and the abdomen adhering solidly at this point; the tumor, including a portion of the stomach, was carefully excised and superficial and profound sutures passed. After the sutures were removed there remained a small fistule, which closed on the fifteenth day, compression being made by means of a bag containing 500 grams of bird shot.

But erysipelas occurred later and was followed by an abscess in the abdominal parietes, which retarded complete cure until the end of the second month.

Seven months later the patient commenced to suffer from the same troubles, and there existed induration at the point where the operation had been performed. She again became enceinte, and scrofulous tumors appearing in the neck, condurango was administered, and the pain disappeared, together with the induration in the epigastrium.

Labor took place at term, the child dying later, of scrofula. In 1878, that is four years later, the patient again became enceinte, but she was at the time suffering from tubercular lesions in the lungs, gave birth to a dead child in the eighth month, and succumbed herself shortly afterwards.

At the autopsy large vomicæ were found in the lungs; the stomach was displaced towards the left and adherent to the spleen. There was a stricture of the stomach between the less and greater curvature, corresponding to the cicatrix left after the operation.

Gastrotomy for Removal of Foreign Bodies.

In the *Revue Generale*, by M. Petit, in *La Revue des Sciences Medicales* (Paris, Oct., 1880), he rather deprecates M. Labbé's method of operating. M. Labbé makes a transverse incision over the stomach, opens the peritoneum on a grooved director, and then drawing the stomach outward, sutures it to each lip of the wound. Then the organ is opened between the sutures, the foreign body extracted, and the stomach allowed to remain in this position; consequently, after cicatrization it remains permanently fixed to the anterior parietes of the abdomen. M. Petit considers that this might interfere with the digestive functions, and in a case reported by Cavazzini, pains attributable to these adherences were noted; again cicatrization is often obtained with difficulty, permanent gastric fistula occurring in some cases, and proving very difficult of cicatrization.

M. Petit advises the temporary fixation of the organ by acupuncture needles passed at the angles of the wound; the incision is then made, and the foreign body extracted. Sutures of carbolized catgut are then passed in the gastric incision, and the organ returned within the abdo-

men. Colin remarks (*Thèse de Paris*, 1877), that but three deaths occurred in 15 cases of gastrotomy for extraction of foreign bodies; while two deaths occurred in 32 cases where no operation was performed.

Inhalations of Turpentine Vapors in Pertussis.

M. Barety, of Nice, reports, in *l' Union Médicale*, that he had at one time four patients in the same family under the usual modes of treatment in pertussis; emetics, belladonna, etc., were tried with little success. At the height of the spasmodic period one of the children was placed in a newly painted room where the odor of spirits of turpentine was very evident; from that moment the fits of coughing became less intense and less fatiguing, and the malady did not have as lengthy a duration as in the other children. M. Barety considered that the amelioration was due to the inhalation of the vapors from the spirits of turpentine, and since that time he places deep plates containing this liquid under the head of the bed, and in the corner of the room in which the little patient sleeps; in this way the turpentine vapors fill the room, which should, however, be freely ventilated twice daily.

The paroxysms of coughing soon become less marked, and the malady takes on a benign character, and lasts generally about one month.

Treatment of Scabies.

M. Fournier, in his lectures on the treatment of scabies, gives the following prescription for an ointment, to be preferred to that of Helmerich, which often proves too irritating:—

℞.	Sodæ carbonat,	℥ iss	
	Sulphur. sublim.,	℥ iij	
	Tragacanth. gum.,	gr xv	
	Glycerinæ,	℥ vj.	M.

The preliminary friction with black soap (St. Louis Hospital mode) may be replaced by prolonged frictions with the ordinary toilet soap; the ointment should then be very freely applied over the whole surface of the body, well rubbed in and allowed to remain, the patient putting on his ordinary under clothing, so that any animalcules contained therein may be destroyed at the same time.

Inoculating Kine.

Dr. S. E. Wills, of Maryland, writes us:—

"I notice Dr. Dingee's article in February 26th, 1880, No. of REPORTER. If he desires to try the experiment of producing vaccinia from variolous matter inoculated in the cow, I hope his experience will be more satisfactory than some I made about twenty years ago, an account of which was published in the REPORTER at the time. I had about forty or fifty cases of inoculated smallpox to deal with, besides a number of cases of variola contracted from inoculated subjects. By some observers the vaccinia transmitted through successive vaccinations, from the time of Jenner is thought to be quite as efficient as the cowpox matter. On theoretical grounds, others prefer the matter direct from the cow. In Maryland, the physicians are furnished gratuitously with bovine virus, and we are prohibited from using any crusts more than two removes from the cow. I have never known a patient who has been three times successfully vaccinated to have varioloid."

Fatal Case of Poisoning by Chlorate of Potash.

In the *Marseille Médical* is the report of a case where a man, sixty-seven years of age, took somewhat over an ounce of chlorate of potash dissolved in warm water, delivered through mistake for epsom salts. Death occurred in seven and one half hours, and was preceded by the following symptoms: vomiting of greenish matter, colic and diarrhœa; general collapse, rigidity of the lower limbs and asphyxia. After death the skin of the back had a slate-colored tinge.

It is well known that the potash salts are poisons which act on the muscles and particularly on the heart. Sulphate of potash is ten times more poisonous than the corresponding soda salt, and chloride of potash may prove poisonous, while the chloride of sodium or ordinary table salt is inoffensive.

SPECIAL REPORTS.

VII—MEDICAL ELECTRICITY.

Mode of Action of Electricity.

Usually electricity is spoken of as a stimulating agent. But in the *Medical Record*, November 20th, 1880, Dr. T. W. Poole, of Canada, insists that in all degrees of strength the current is a paralyzer. He will not acknowledge that it is a stimulant, tonic, or vitalizer. At least not directly so; and he undertakes—not with much success, we think—to argue on the subject, *a priori*, in the following wise:—

Electricity is one of the forces of nature, and the mode of action of the natural forces is necessarily invariably uniform and consistent. From the spark of the battery to the flash of lightning there is an immense progression in power, but the addition of any number of sparks to that of the battery can in no way change its character or modify its mode of action, which is ever the

same, and tends toward the same goal. Just as the flash of lightning kills, the battery spark tends to kill, in proportion to its power, and only fails to kill because of its feebleness and the counteraction of opposing forces. We take advantage of its weakness (as we do of fire, water. heat, etc.) to render it beneficial to us; and if the *effect* produced is different from that of the very powerful current, or the scathing lightning, it is not that the thing itself has changed its nature or modified its mode of action. If the greater discharge of electricity is a paralyzer. the battery spark is a paralyzer too, in proportion to its power; the difference being not in quality, but in degree. To assert otherwise is to controvert the plain teaching of natural science.

The error which lurks here is in the conception of nerve force. This is not a simple but a complex resultant force, holding its nature and existence from the combination of the elementary forces; each is a stimulant to it in certain degrees; each paralyzing and destructive beyond this degree.

Applications of the Faradic and Galvanic Currents.

Some sound and practical suggestions are given by Dr. A. Gunther, of Zurich, in the *Centralblatt für Chir. Med.*, No. 30, 1880. He teaches that the faradic current has valuable applications in the following diseases: 1. *Asphyxia*, both of infants and in that which occurs in catarrhal pneumonia, convulsive cough, atelectasis and accidents. One pole with a broad electrode is to be placed in the interscapular space, while the other, in the shape of an electric pencil, is to be run up and down the thorax and abdomen, after thoroughly drying the skin. 2. *Pendulous abdomen.* One electrode at the sternal insertion of the rectus abdominis, while the other is run up and down the muscle, the stream to be strong enough to induce forcible contraction of the biceps. 3. *Habitual constipation.* One electrode with a broad base on the perineum, while the other is carried up and down the course of the colon. 4. *Chronic cystitis*, with thickening of the vesical walls and incontinence. Electricity is contraindicated where erosions or ulcers of the vesical mucous membrane are present. One pole may be placed on the perineum, the other over the symphysis; or the one over the symphysis, and the other inserted as a catheter into the bladder. 5. *Impotence.* The testes can be taken between the two electrodes; or the glans can be placed between them.

The galvanic current is particularly efficacious in 1. *Chronic pleuritic effusion.* The anode on the sternum, the cathode *in loco dolenti*; a battery of 18 Stöhrer elements. 2. *Chronic periostitis:* The negative pole at the seat of disease. 3. *Chronic muscular rheumatism.* Use 8 to 10 elements, broad electrodes, moved slowly up and down each muscle for about two minutes at a time.

Dried Collodion as an Electrical Agent.

Dr. Seure, of Paris, has published a memoir, which was presented, last summer, to the Academy of Medicine, on the electric properties of dried collodion. He finds that thin leaves of this substance, which may be detached from glass or metal plates, are negatively electric in the very highest degree, sulphide of copper and gutta-percha being positive in respect to them. In the dark they become luminous by friction, and when rubbed with the fingers they give rise to a sensation of numbness. If the outside of a bottle be covered with collodion, and then rubbed, small sparks can easily be obtained. Dr. Seure thinks that some therapeutic effects may be obtained from this substance. He suggests that leaves of dried collodion should be sewn on the inside of the garments worn by hemianæsthetic subjects, or that they should wear under sleeves or leggins of collodionized silk.

Disturbances of Menstruation.

In the *Allg. Med. Cent. Zeitung*, Nov. 10, 1880, Karl Kihn states that he has had recent opportunities to convince himself of the value of the electrical current in amenorrhea and dysmenorrhea. He especially advises it in connection with hot infusions of juniperaceæ and warm foot baths. His plan is to place one electrode in the hand of the patient and to lay the other in the water of the foot bath. In a number of cases this simple measure increased the flow, relieved the pain, and established a regular and comparatively comfortable return of the periods.

The Induced Current as a Stimulant in Parturition.

A valuable study of the effects of the induced current in parturition, based on the observations of 41 cases, is contributed to the *Lancet*, Jan. 1, 1881, by Dr. W. J. Kilner, electrician to St. Thomas' Hospital. He uses it especially in cases where the pains are short, feeble and at long intervals, and states:—

My first experiments were especially directed to discover whether the pregnant uterus, like the voluntary muscles, possesses *motor points*. After many trials, the conclusion I arrived at is that motor points exist, and can be easily found bisecting the line drawn from the umbilicus to the middle of Poupart's ligament. This point is approximate. being only applicable before the uterus has descended, to allow the head of the child to enter the pelvis, and the spot varies slightly in each case according to the position of the uterus. When we talk of motor points, we must recollect that the uterine muscular fibres

are of the unstriped variety, and that they do not respond to galvanic stimulation so quickly as the striped muscles.

When the poles of the coil are placed upon the spot just indicated, the first thing observed is the immediate contraction of the abdominal muscles, the intensity of which depends upon the strength of the current. Occasionally, at the instant of contact, uterine contractions commence, but more often a lapse of about a quarter of a minute is required, and not unfrequently they are delayed for two or three minutes. But still the current is taking effect, as the intermittent use, for instance, half a minute on and the same off, rarely fails to induce contractions in a few minutes; these increasing gradually in severity and duration, while the intermissions become less and less. Latterly, however, I have applied the current only during the contraction, to obtain the benefit of the relief of pain.

He appends the details of several cases, one of which illustrates a frequent occurrence—namely, that *the pains do not cease until the current be discontinued*, but however more frequently, although the pains become very prolonged, yet they stop of their own accord. It it be wished merely to prolong any one uterine contraction, the current is best applied near the termination of the pain, when it will commence *de novo*.

From the observations he made he found it comparatively easy to say beforehand what patients are the most likely ones to be affected favorably by the induced current, viz: (1) Those of a nervous temperament, who are easily excited, and who usually feel pain acutely; (2) those who have sympathetic disturbances, such as vomiting and hiccough; (3) those who require stimulation. In Dr. Kilner's opinion, the best way of applying the current is to place the electrodes (each being about three inches in diameter) upon the abdomen, over the motor points, these being retained in their proper places by the binder. It is easy to make flat electrodes of spongio-piline by running through the waterproof covering several wires, in different directions. Large electrodes are preferable to small ones, because the same current spread over a large surface is not felt so acutely as when it is concentrated into a small space. For the relief of pain a very mild current is only required, but for the production of uterine contractions a variable strength is necessary.

Galvanization of the Medulla in Diabetes Insipidus.

The researches of Claude Bernard established the fact that pricking certain points on the floor of the fourth ventricle causes polyuria, sometimes with, sometimes without sugar. As this and other experiments seem to indicate that the seat of the affection is in the medulla. it occurred to Dr. Julius Althaus, to apply this clinically and to resort to galvanization in a case of diabetes insipidus, which he reports in the London *Medical Times and Gazette*, November 27th, 1880:—

A gentleman, aged thirty-seven, single, consulted me on July 27th, 1880. He had spent many years in the tropics, and had suffered from persistent diarrhœa, which nothing would arrest. This ultimately brought on a state of complete cerebral exhaustion, and he was entirely incapacitated from attending to his occupation. The most troublesome among the numerous symptoms from which he suffered, however, was that of polyuria, which was so bad as to exclude him altogether from society. When in company, he could hardly sit still for a quarter of an hour without experiencing a most pressing desire to empty his bladder; and this annoyance had led him to adopt a solitary mode of life. The average quantity of urine which he passed during the day amounted to ninety ounces, but often much more. It was feebly acid, had a low specific gravity, and contained no sugar or albumen, nor any excess of urea. As he had taken gallons of physic without the slightest relief, he wished to ascertain from me whether any mode of applying galvanism to him might be expected to be of service; and I therefore proposed to apply the constant voltaic current to the medulla. He eagerly grasped at this proposal, and I then applied the current of fifteen cells of Becker-Muirhead's battery to the occiput, taking care that the medulla received alternately the influence of the anode and cathode, and regulating the finer degrees of voltaic power by means of the rheostat. The application lasted altogether six minutes, and was entirely painless.

The patient came to see me again a week afterwards, and informed me that the result had been completely successful. The quantity of urine passed during the day had, after the application, fallen to thirty ounces; and while formerly he had often had incessant calls to pass his water, he had since then only been obliged to pass it three times a day. This improvement was also permanent.

The Electro-Magnet in Paralysis of Sensation.

An interesting application of the electro-magnet was reported last summer, in the *British Med. Jour.* (August 7). Three cases of partial paralysis with anæsthesia are related by Dr. Dreschfeld. They were as follows: 1. Hysterical anæsthesia affecting both sides of the body, and also the special sense organs. 2. Partial epilepsy, most probably of syphilitic nature; anæsthesia. 3. Left hemiparesis, with involuntary movements of arm and leg; left hemianæsthesia; left hemianopsia; mental disturbances.

The immediate effect of the electro-magnet in all the three cases is reported as very striking. In the first case, the application was so conducted that there could be no deception on the part of the patient; the second case closely re-

sembles cases of meningeal syphilitic inflammation; in the third case there can be no doubt as to the presence of organic lesion. The anæsthesia in the second case might have been cured by the prolonged administration of iodide of potassium; and in the third case it might have gradually diminished, but the sudden effect produced by the magnet is specially interesting from a physiological point of view.

Negative results were obtained from the use of the magnet in two cases of progressive muscular atrophy, accompanied by analgesia without anæsthesia, also in lesions of peripheric sensory nerves. It seems, therefore, that the magnet is only of use in cerebral cases, and would thus be of diagnostic value in doubtful cases.

The Galvano Cautery in Nasal Catarrh.

This plan of treatment has been tried by Dr. W. C. Pipino, of St. Louis (St. Louis *Medical and Surgical Journal*, 1881). He states that cases where most benefit is derived from the application of the galvano-cautery are those in which there is great structural change, as hypertrophy of the mucous membrane over the inferior and middle turbinated bones, causing an obstruction to the free passage of air through the nasal passages; deflection of the septum to the right or left must not be mistaken for hypertrophy of the membrane covering it, although we frequently find the membrane covering the posterior part of the septum hypertrophied, as well as that over the turbinated bones; defective hearing, excessive secretion, with the formation of crusts, and follicular degeneration of the membrane of the posterior nares and pharynx.

Nothing short of the partial or total destruction of the hypertrophied tissues will answer. The cicatricial contraction of the tissues from the heated wires deprives it of its erectile nature, removes the obstruction, allowing the free passage of air through the nose.

Electricity in Asthma.

Dr. R. Schmitz reports (in *Deutsche Med. Wochensch.*, 20th November, 1880) a case of asthma in which the good effects of the induced electric current were manifest—the patient, a man of forty, having obtained no relief from any of the means usually resorted to in such cases. It was noticed that each attack was preceded by a catarrh, which invaded successively the larynx, trachea, and bronchi; on the supposition that the pneumogastric nerve was probably subjected to pressure in its course by the swelling of the respiratory mucous membrane, it was determined to treat the nerve directly by electric currents. At the first *séance*, which took place in the evening, the electrodes were placed on the sides of the thyroid cartilage, at the internal border of the sterno-mastoid muscle. The current, at first feeble, but subsequently gradually increased in intensity, was passed for nine minutes. The relief which followed was so marked, that the patient slept the greater part of that night. Two applications of the current were made daily, for fifteen minutes each time; after the twelfth application the asthma, and with it the bronchitic râles, had disappeared. A subsequent attack was readily cured without electricity. It must, however, be borne in mind, that faradization of the pneumogastric nerve must be set about cautiously, as, if the current employed be sufficiently strong, the heart's action may be definitely arrested.

The Electric Treatment of Exophthalmic Goitre.

On this subject a paper by Dr. A. D. Rockwell, detailing the results of the treatment in nine cases, will be found in the *Trans. Am. Med. Assoc.*, 1880. It appears, in about one-half the cases it is of positive and permanent benefit.

Another valuable paper in this volume is on

The Strong Galvanic Current in Obstinate Sciatica.

The author, Dr. V. P. Gibney, relates thirty-two cases thus treated with very good results. Daily applications are made for at least a fortnight. The electrodes are applied in turn over every point of pain. A constant current of Leclanché battery is used, as strong as the patient can endure. Marked good results show themselves after two or three séances.

In the same volume is an essay on

The Galvano-cautery in Diseases of the Naso-Pharynx.

By Dr. W. H. Daly, of Pittsburgh. In estimating its value in such diseases, he does not place it very high, and doubts if the instrument will become popular, as "its expense is considerable and its behavior capricious." In most tumors and growths the mineral caustics are preferable, as they are both cheaper and "altogether less liable to be followed by serious local or constitutional symptoms."

—Louis Lessard, of Montreal, was born in Paris, France, in 1777, and on March 7th he fulfilled the duties of a Coroner's juror with the keenness of intellect of a man half his age. He owned a silver snuff-box, presented to him by Napoleon I, after the battle of Austerlitz. He served under Napoleon in most of his great battles, ending at Waterloo. He removed to Canada in 1830.

CORRESPONDENCE.

A New Test for Glycosuria.

ED. MED. AND SURG. REPORTER:—

Having a vial containing some suspected urine in my hand, standing beside a hot stove, the thought occurred to me, that if there is sugar in it, by dropping a small quantity of it upon the stove I will get the smell of burnt sugar. The thought prompted the act, when "presto," the room was filled with the characteristic fumes. I then proved it by the yeast test, and a neighbor, by the copper and urinometer.

I have no recollection of hearing or reading of this test, but I believe it will prove infallible.

Carlton, New York. T. R. BAMBER, M.D.

Quintuple Birth.

ED. MED. AND SURG. REPORTER:—

September 18th, 1880, at two o'clock, I was called to see Mrs. H., of this city, who was about to be confined, for the fifth time. Found her in poor health, pale, had a weak pulse and her feet and ankles were considerably swollen. She is thirty five years of age, and has never had more than one child at a time before. At this time the pains were light, as they were during the whole time of the labor, she not having sufficient strength to assist at any time the expulsive force of the uterus.

On examination per vaginam, I found a breech presentation, and the hips entering the superior strait. The labor proceeded slowly and naturally until a little after four P. M., when the first child was born, without making any perceptible difference in the size of the mother.

After cutting the cord I made an examination, and found the feet of a second child presenting. This one was born about nine o'clock, P.M., without any trouble, except that the labor was tedious, on account of weakness of the woman.

About this time I began to comprehend the situation, for after the birth of two, there did not seem to be much decrease in the size of the abdomen. The cord being cut, on examination I found the feet of a third one presenting. This one was born at 2 o'clock, A. M., of the 19th, a fine, plump boy, but still-born. After cutting the cord, I found still another one, with the feet presenting.

You ought to have seen the expression on the faces of the women present, as they looked at one another! I cannot describe it.

This (fourth) one was born in about half an hour, and still-born. Now I thought that must be all, and after waiting awhile proceeded to remove the placenta, or placentæ. After removing one, my finger came against something sharp, which surprised me at first, but I soon found it to be the ends of the fingers of a fifth child, whose head was now in the hollow of the sacrum with one hand over the head. The pains had all ceased. After waiting a considerable time, and doing all I could to bring on the pains again, without success, I sent for the forceps. They having arrived, I delivered her in a few minutes without trouble. This one was also still-born. The lady made a good recovery in about the usual time.

The first child lived two weeks, the second one three days. The others, as stated above, were still-born. They were all well-developed and came at full term. The weight of the five was nineteen pounds. First one five pounds, second one four pounds, and the others a little over three pounds apiece. There were two placentæ, three cords attached to one and two to the other.

Monticello, Ill. JAMES MOFFITT, M.D.

NEWS AND MISCELLANY.

COLLEGE COMMENCEMENTS.

Jefferson Medical College.

The fifty-sixth annual commencement of the Jefferson Medical College was held at noon on Saturday, March 12, in the Academy of Music. The building was filled to its utmost capacity. On the stage were seated the Trustees and Faculty of the College and invited guests. The graduates, numbering two hundred and five in all, occupied seats in the main part of the orchestra. After prayer had been offered by Rev. I. L. Nicholson, of St. Mark's P. E. Church, Dr. E. B. Gardette, President of the institution, conferred the degrees upon the graduates.

The following prizes were then announced and awarded:—

1. A prize of $100, by Henry C. Lea's Son & Co., for the best thesis, to Henry D. Bruns, of Louisiana, with honorable mention of theses of C. W. DeLarmoy, of Pennsylvania; Robert Lee Payne, Jr., of North Carolina; and H. J. Williams, of Georgia.

2. Prize of $50, for the best essay on a subject pertaining to surgery, to Joshua Ellegood, of Delaware, with honorable mention of the thesis of M. J. Cohen, of Penna.

3. Prize of $50, for the best essay on a subject pertaining to obstetrics, to S. Howard Wilson, of Pennsylvania, with honorable mention of J. H. Koons and E. R. Smiley, both of this State.

4. Prize of $50, for the best essay on a subject pertaining to Materia Medica and Therapeutics, to J. C. Martin, of Ohio, with honorable mention of L. M. Bullock, of New Jersey, and S. S. Ullrick, of Pennsylvania.

5. Prize of $50, for the best anatomical preparation, to E. N. Taylor, of Pennsylvania.

6. Honorable mention, by Professor Rogers, for the best original research in the chemical laboratory, to L. L. Artis, of Cuba.

7. Prize of a gold medal, by Professor Chapman, for the best final examination in physiology, to A. J. Dodds, of Syria.

8. Prize of a gold medal, by R. J. Levis, M.D., for the best report of his surgical clinics at the Pennsylvania Hospital, to G. W. Stout, of Pennsylvania, with honorable mention of the report of Charles F. Spangler, also of this State.

9. Prize of a gold medal, by Thomas G. Morton, M.D., for the best report of his surgical clinics at the hospital, to L. L. Rogers, of this State.

The Valedictory address to the graduates was

delivered by Prof. Roberts Bartholow, M.D., after which the exercises were concluded with the benediction.

Dental Colleges.

The two dental colleges in this city turned out one hundred and twenty-five graduates on February 26th. At noon the twenty-fifth annual commencement of the Pennsylvania College of Dental Surgery was held at the Academy of Music, a large audience being in attendance to witness the ceremonies.

The following gentlemen were awarded prizes: William Lewis Cave, James G. Palmer, L. Bischoff, Eduardo Gaviria, W. Dammann, G. L. Simpson, A. M. Lorens, L. P. Cook, R. F. Guenther, E. Dalman, Oscar Klien and G. V. I. Brown.

In the evening the eighteenth annual commencement of the Philadelphia Dental College was held at the Academy of Music. There was a large audience present and the floral tributes were numerous.

Other Colleges.

On February 24th the Fort Wayne Medical College graduated twenty-two M. D.s. Dr. Van Sweringen delivered the address to the graduating class.

On February 25th, the Louisville Medical College graduated a class of fifty-four. The valedictory address was delivered by Dr. A. H. Keller, of Kentucky.

The Ohio Medical College, in Cincinnati, turned out one hundred and three graduates on Wednesday, March 2d. The Pulte Medical College (Homœopathic), forty. The College of Medicine and Surgery, thirty; and the Ohio Dental College, twenty-nine.

The Little Rock Medical College, March 2d, graduated ten students.

The Jefferson Alumni Association.

The Alumni Association of Jefferson Medical College held their annual meeting Friday, March 11, in the lecture room of the college, Professor S. D. Gross, the President, in the chair. Considerable interest was awakened by a resolution offered by Dr. S. W. Gross, requesting the faculty to prohibit any student from competing for a prize unless he has taken three courses of lectures. The resolution was withdrawn after some discussion, Dr. Gross saying that he only desired to call the attention of the faculty to the subject. The usual reports of committees were presented, and the present officers were re-elected for the ensuing year. In the evening, after an oration by Dr. Osgood, the annual alumni supper was given at Augustine's. Professor Gross presided, having on his right the orator, Dr. Osgood, and on his left Professor Beverly Cole, of the University of California, and among the thirty or forty others at the table were Professor R. E. Rogers, Dr. Hewson, Dr. Pancoast, Dr. J. H. Brinton, Dr. Andrews, Dr. Keen, Dr. S. W. Gross and other prominent practitioners. Toward the end of the banquet a few formal toasts were given, Dr. Osgood replying briefly to that to "The Orator;" Dr. Cole responding on behalf of "Our Guests;" Dr. Hewson for "The Alumni;" Dr. Rogers for "The Jefferson Medical College;" Dr. R. J. Dunglison for "The Medical Press," and Dr. Lambdin for "The Daily Press." After all the speeches the health of the Emeritus Professor of Surgery, Dr. Joseph Pancoast, was drunk standing, and the president declared the evening ended.

Women's National Hospital.

The Women's National Hospital at Hartford, Connecticut, designed for the treatment of women addicted to the excessive use of alcohol or narcotics, was recently chartered by the Connecticut Legislature. The Board of Corporators have recently elected the following officers: President, Dr. Marion Sims, of New York; Vice Presidents, Dr. Frank H. Hamilton, of New York, and Dr. George B. Hawley, of Hartford; Secretary, T. D. Crothers, of Hartford. The Trustees are leading physicians from ten different States. The hospital will probably be erected in Fairfield County, Conn.

Longevity of Women.

The recent European statistical returns of the population of Europe have supplied the statistical department at Vienna with the means of making an interesting study as regards longevity. It results from this, that of 102,831 individuals who had exceeded the age of ninety years, 60,303 were women, and 42,528 men. The greater longevity of women is exhibited also by the greater chances of women of attaining or exceeding the hundredth year. Thus, in Italy there are found 241 female centenarians for 141 male centenarians, and in Austria 229 women for 183 men. In Austria there are 1,508,359 sexagenarians, or 7.5 per cent. of the total population.

Items.

—A large number of petitions have been received in the Michigan Senate, in favor of a chair of eclectic medicine at Michigan University.

—Another doctor is presently to be knighted in England. He is Dr. James R. Bennett, F. R. S., President of the Royal College of Physicians.

—Two allopathic physicians, one homœopathic, and one eclectic are serving amicably together, as a committee appointed by the Connecticut Legislature, to draft a Medical Practice act.

—An immense laboratory for chemical analysis is, by order of the Préfet de Police, about to be opened. Experts will there be at the service of the public, for the purpose of analyzing wine, milk, chocolate, coffee, meat—in a word, all articles of consumption—and that for very small fees. This war against adulteration well deserves approval and encouragement.—*Gaz. Méd.*, January 28.

OBITUARY NOTICES.

DR. GEORGE A. OTIS.

We have received the following announcement from the Surgeon General's Office:—

It is with profound regret and a sense of loss,

not only to his corps, but to the medical profession, that the death of George Alexander Otis, Surgeon and Brevet Lieutenant Colonel, U. S. Army, is announced to the Medical Corps of the Army.

Born at Boston, Massachusetts, November 12th, 1830, he graduated with the degrees of A.B. and A.M. from Princeton College; entered the Medical Department of the University of Pennsylvania, and received his degree of M.D. from that Institution in 1850; visited Europe, and prosecuted his studies in London and Paris, and returning to this country he established himself at Springfield, Massachusetts; appointed Surgeon 27th Massachusetts Volunteers, September, 1861, he held this position until appointed Surgeon U. S. Volunteers, August 30th, 1864. After the close of the war he entered the Medical Corps, U. S. Army, as Assistant Surgeon, February 28th, 1866; became Captain and Assistant Surgeon, July 28th, 1866; Major and Surgeon, March 17th, 1880, having received the four brevets of Lieutenant Colonel of Volunteers, Captain, Major and Lieutenant Colonel, U. S. Army, for meritorious services during the war. While Surgeon of the 27th Massachusetts Volunteers, he served in Virginia, North and South Carolina, and was on special duty in charge of the hospital steamer "Cosmopolitan," in the Department of the South. Assigned to duty in this office July 22d, 1864, he was Curator of the Army Medical Museum, and in charge of the Division of Surgical Records until his death.

He was editor of the Richmond *Medical Journal* for three years, member of the leading medical societies of America, and corresponding member of various similar societies in Europe, and a contributor to prominent medical journals. Surgeon Otis, with his personal observations of the surgical collections abroad, brought indefatigable industry and untiring energy to the development of the surgical and anatomical collections of the Army Medical Museum, which he has made the most valuable of their kind in the world. The compilation of the Surgical Volumes of the Medical and Surgical History of the War has placed Surgeon Otis confessedly among the most prominent contributors to surgical history.

While on duty in this office Surgeon Otis wrote for publication no less than ten reports on subjects connected with military surgery, etc.; among which are his most valuable and exhaustive reports on "Excision of the head of the femur for gunshot injury," and on "Amputation at the hip-joint in military surgery." Of great culture, retentive memory, and with a remarkable facility of expression, he was, as a compiler and writer, conscientious in his analysis, giving his deductions from the facts before him, with modesty, but decision. With such a record it is needless to speak of his zeal, his ambition or his devotion to his profession, and especially to the reputation of the corps of which he was so bright an ornament. While devoting himself to the preparation of the third and last surgical volume (now more than half completed) of the Medical and Surgical History of the War, he died in this city, February 23, 1881. His untimely death will be deeply deplored, not only by the medical corps of the army, but by the whole medical profession at home and abroad.

JOS. K. BAMES, *Surgeon General.*

—Wm. Walker, M.D., for eighteen years a practitioner at Monmouth, Ill., died in that city on Sunday, Feb. 20th, in the 61st year of his age. His disease was typhoid pneumonia, complicated with inflammation of the bowels. A native of Pennsylvania, he graduated at an early age from Bethany College, West Virginia, and in 1853 received from Jefferson Medical College, Philadelphia, the degree of M.D. After a few years' practice at Rock Lick, Marshall Co., Va., he moved to this thriving Western city, where the remainder of his life was passed.

Among the medical fraternity of the Military Tract, no one was more widely known or thoroughly esteemed. And in commercial pursuits he proved no less successful than in his chosen profession. For a number of years he was a director of the First National Bank of Monmouth, and a prominent figure in other local enterprises and industries.

As a tribute of respect to his memory the banking houses of the city closed their doors on the day of his burial.

—Dr. Thomas C. Cox, of Trenton, died in Kalamazoo, Mich., last week. He was a student at the Jefferson Medical College, and upon his graduation joined a Pennsylvania regiment as Assistant Surgeon, serving creditably until the close of the rebellion. After being mustered out he practiced his profession for awhile in Chester County, Pa., but soon drifted into journalism, for which he had a predilection and in which he was chiefly occupied.

—Dr. James Burd Peale, of Holmesburg, died suddenly, in this city, on the 2d inst., of disease of the heart. He was prominent as a surgeon during the war, having been, at one time, Medical Director in the army of the Potomac.

—Dr. Andrew Wood, LL. D., a distinguished Edinburgh physician and literary man, died early in February.

MARRIAGES.

DOUGLAS—FULLER.—At St. Andrew's Church, Pittsburg, Penn, Anna Marie, youngest daughter of the late Capt. Fuller, C. E. I. S., to William Douglas, M.D., of Belfast, Ireland.

PARKS—WILLITS.—On 2d Mo. 23d, 1881, at Friends' Meeting House, Downingtown, Pa., Thomas E. Parks, M.D., and Meribah A. Willits.

DEATHS.

BROWN.—At Staunton, Va., February 10th, Dr. J. Lewis Brown, formerly of Philadelphia.

COMFORT.—On the 9th inst., near Wyoming, Minnesota, Dr. J. W. Comfort, formerly of Philadelphia, aged 79 years.

GREGORY.—At Mount Vernon, N. Y., March 2d, 1881, Joseph S. Gregory, M.D., in the 57th year of his age.

PEALE.—In this city, suddenly, on the morning of the 2d instant, J. Burd Peale, M.D

RUSS.—On Tuesday, March, 1, at his residence, in Pompton, N. J., John D. Russ, M.D, in the 80th year of his age.

STEVENSON.—At Morristown, N. J., on Wednesday, February 16th, Dr. R. W. Stevenson, in the 77th year of his age.